

STRUCTURE, OPERATION, PERFORMANCE,
AND DEVELOPMENT TRENDS OF THE MOBILE HOME INDUSTRY

Volume IV

THE MOBILE HOME PARK SYSTEM

July 15, 1976

by

ARTHUR D. BERNHARDT
MICHAEL BURRILL
HERBERT B. ZIEN
THOMAS R. DIBENEDETTO

with

Eric F. Strovink
Kathleen McCartney
Susan A. Camardo
Peter J. Mancuso
Dean Heerwagen

Program in Industrialization of the Housing Sector
Massachusetts Institute of Technology

for



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NOTE TO READER

This report is organized into five volumes, with each volume containing several sections. Following is a complete listing of all volumes and sections, with asterisks in the left-hand column identifying the volume you are now reading:

- VOLUME I: THE BUILDING INDUSTRY TOMORROW:
THE CASE OF THE MOBILE HOME INDUSTRY
Sections: Introduction
 The Mobile Home Industry: An Overview
 The Mobile Home Industry's Product:
 Today and Tomorrow
- VOLUME II: THE MOBILE HOME PRODUCTION SYSTEM
Sections: Supply Sector Influence
 Industrial Organization
 Manufacturing
 Cost/Price Analysis
 Manufacturer Financing
 Appendix
- VOLUME III: THE MOBILE HOME DISTRIBUTION SYSTEM
Sections: Industrial Organization
 Distribution
 Cost/Price Analysis
 Dealer Financing
 Consumer Financing
 Appendix
- *** VOLUME IV: THE MOBILE HOME PARK SYSTEM
Sections: Industrial Organization
 Park Development and Operation
 Cost/Price Analysis
 Park Financing
 Appendix
- VOLUME V: PUBLIC REGULATION
Sections: Land Use Controls
 Taxation
 Building Code Regulation
 Highway Regulation
 Appendix

In each volume, roman numerals are used to designate the title page and the subsequent pages before the beginning of the first section. Each section is organized

as an independent entity, and has its own page numbering system and its own Table of Contents. Each section starts with page number 1 and ends with a page number determined by the section's length. All pages of each section show the title of that section in the upper left-hand corner of the page, so the reader can quickly find the first page of each section by flipping the pages of the volume.

Therefore, bibliographical references need list only report authors and report title, volume number, section title, and page number: i.e., Bernhardt, Arthur D., et. al., Structure, Operation, Performance and Development Trends of the Mobile Home Industry, Volume II, Section "Manufacturing," page 19 (or, Volume II, page vii).

Acknowledgements for Volume IV

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IV
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Principal Investigator and Director,
Project Mobile Home Industry

Director,
Program in Industrialization of the Housing Sector
Massachusetts Institute of Technology

Cambridge, Massachusetts
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INDUSTRIAL ORGANIZATION

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A.

INTRODUCTION

The housing unit delivered by the mobile home industry's production system is only one component of the industry's final product. The second component -- the developed site with foundation and utilities -- is an essential complement to the housing unit (mobile home) and in many cases costs almost as much as the unit itself. It is obvious then that the mobile home park system deserves as thorough an analysis as the production and distribution systems.

The park system serves a function more essential to overall industry performance than is evident at first glance. The performance of the park system directly determines the supply of developed land for placement of the mobile home. The annual unit production capacity of the production system far exceeds the annual production rate of new sites. The supply of land is artificially limited by many factors, including exclusionary or restrictive land use control practices and local economic and political opposition. The effectiveness with which the park system deals with these obstacles greatly influences the rate of new site development. Since, for the immediate future, the supply of land will remain well below unit production capacity as well as below the demand level for mobile housing, the performance of the park system will continue to determine the aggregate effective demand for the mobile home industry's product.

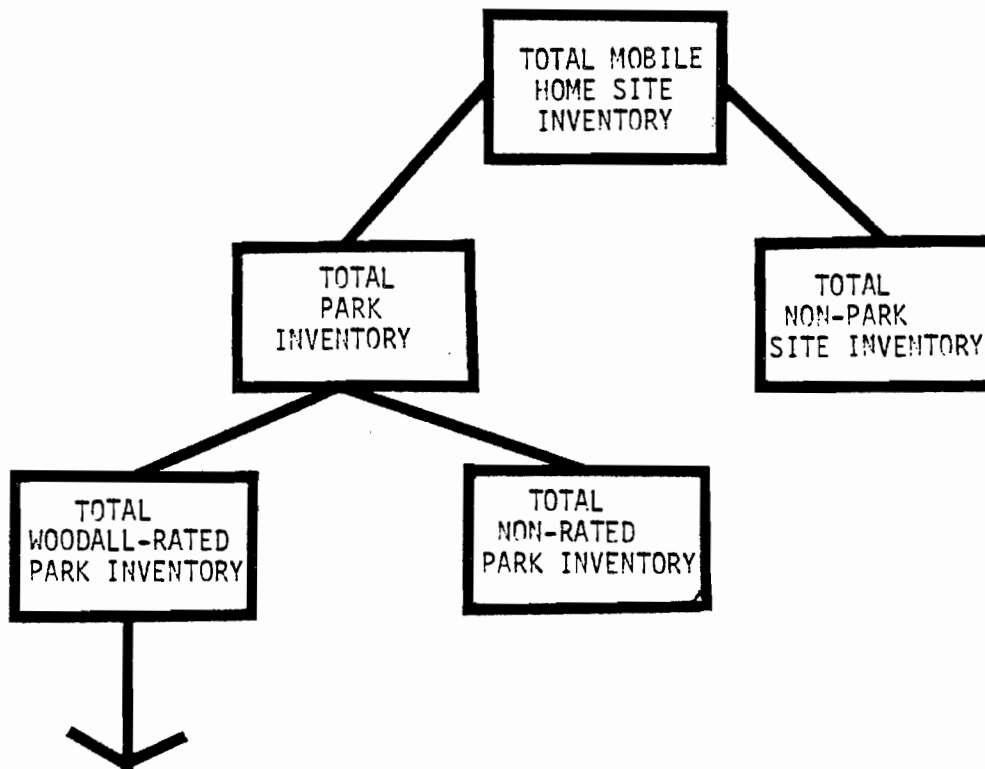
The analysis in this section delves into the industrial organization of the park system and its implications for the economic performance of the system. Because of the crucial importance of the park system for the industry at

large, special emphasis is placed on understanding the interactions and interrelationships between this system and the industry's production and distribution systems. Finally, an attempt is made to identify potential ways to achieve improvements in the economic performance of the park system.

It is important to explain the definition of the mobile home park system which underlies the analysis in this section. Mobile homes are located both in mobile home parks and on individual, scattered lots. Mobile homes located on individual lots are not considered part of the park system; scattered sites are not the product of an "industry" but of the mobile home owner's individual initiative. The total mobile home park inventory, furthermore, can be divided into Woodall-rated parks and non-rated parks. Woodall Publishing Company is a national organization rating only those parks meeting minimum quality standards established by Woodall; rated parks include most of the larger, recently-developed parks. Non-rated parks are typically older and smaller parks, often built to the less rigorous development standards of the past. The mobile home park system is defined to comprise the sum total of all rated parks and to exclude all non-rated parks. This definition has been arrived at for two reasons. First, rated park operations tend to view themselves much more as part of an "industry" than non-rated operations do. Second, the data available on non-rated parks is extremely limited.

While this section focuses on the park system as defined, the structure of the section reflects the need to maintain a perspective on the total inventory of all sites on which mobile homes are located. First, in chapter B.1.1, the total inventory of all park sites and non-park sites is

analyzed. Then, in Chapter B.1.2, the analysis focuses on the mobile home park inventory only, including both rated and non-rated parks. Finally, starting with Chapter B.2, the remainder of the section deals exclusively with the Woodall-rated park inventory -- the mobile home park system. The following diagram depicts the organization of this section.



The basic, primary data used in this industrial organization analysis of the park system include the results of Project Mobile Home Industry's national park survey and raw data obtained from the Woodall organization. Other sources that provided primary and secondary data are too numerous to list here.

B.

THE PRESENT SITUATION
AND EMERGING TRENDS

1.

Statistical Perspective

1.1 MOBILE HOME INVENTORY

1.1.1 National Distribution of Mobile Homes

Our calculations for 1974,¹ identify close to four million mobile units as year-round housing. How this housing was being utilized throughout the United States deserves examination. Was there an even distribution of these mobile homes within the country, by state and by region, and what were the growth patterns of mobile home housing within the states and regions?

Mobile Home Distribution by State: 1974

Figure 1 reveals that the pattern of mobile home location is very uneven across the United States. The states of Florida and California have the largest proportions of the national market; 9.2% and 7.6% respectively, or a combined total of 16.8% of the approximately four million units in existence. Almost one out of every six mobile homes is located in either Florida or California.

The sense of uneven distribution is amplified through examination of the next three leading states: Texas, North Carolina, and Georgia. These three states represent 6.1%, 5.1%, and 4.4% of all units respectively. When combined with California and Florida, these five highest ranking states, account for almost one third of all the mobile homes in the nation's total inventory. The six lowest ranking states and the District of

Columbia (national rank 45 through 51) on the other hand, account for only 1.5% of the national inventory.

Changing State Patterns: 1960-1970; 1970-1974

It is important to examine the changing distributional pattern of mobile homes from 1960-1970 and 1970-1974 to determine the possibility of emerging geographical patterns. A look at the rankings provided in Figure 1 shows that California and Florida retained their ranking as the two leading states from 1960-1974. However, while California held the first place ranking from 1960 to 1970, it had become the second leading state by 1974. Its relative share of the market dropped sharply from 13.3% in 1960 to 9.5% in 1970, and in 1974 its relative share dropped to 7.6%. On the other hand, Florida not only improved its ranking but also retained its relative share. By 1974, Florida's relative share of the market increased to 9.2%, thereby displacing California to become the top ranking state.

It should be noted, that during the 1960-1970 period, many states showed growth rates which deviated considerably from the national average of 170.6%. In ten states, the unit inventory grew by less than 100%. On the other hand, several states, North Carolina, Arkansas, Georgia, Alabama, and West Virginia, showed growth rates in excess of 400%.

The average annual national growth rate for the 1970-1974 period is 21.9% which is slightly greater than that for the 1960-1970 period which showed an average annual national growth rate of 17%. An analysis of the state growth

rates, however, shows that the national growth pattern is representative for less than half the states. In fact, twenty-three states saw their percentage of the mobile housing stock fall to a lower level in the 1970-1974 period than it had been in the 1960-1970 period. Seven states retained the same percentage of the mobile housing stock from 1960-1970 to the 1970-1974 period. The slight increase of the national growth rate in the 1970-1974 period can be attributed to the twenty states that did increase their percentage of the mobile housing stock. Therefore, these figures suggest a greater concentration of the national mobile housing inventory within a fewer number of states while the absolute number of mobile homes did not decline in any state.

Mobile Home Distribution by Regions: 1974

Having noted the variation in distribution and growth rates from state to state, the examination turns to the regional divisions employed in the Decennial Census: the Northeast, North Central, South, and West. Figure 5 reveals that the South is by far the leading region in number of mobile home units. The Southern states contain 46.7% of the total, or 1,818,209 units. The North Central states and the West contain 22.8% (887,923) and 20.1% (779,435) respectively. The Northeast accounts for the remaining 10.5% (409,587). By partitioning the four regions into sub-regions the geographical differences are sharpened. For example, 26.4% of all units in 1974 were found in the South Atlantic states. New England had only 2.4% of the total.

Changing Regional Patterns: 1960-1970; 1970-1974

For the last 15 years, the South and each of the Southern sub-regions increased their relative share of the mobile housing stock. All of the other regions experienced a decline in their percentage of the national mobile housing stock. This significant trend in the distribution of mobile homes may have been caused, in part, by the economic revitalization of the Southern region (e.g. availability of new jobs) and generally more economical living conditions (e.g. lower fuel costs, etc.).

Summary

The distribution of mobile homes in the U.S. in 1974 was very uneven. A few states contained more than a third of all units, while several states accounted for less than one percent of the total. For many states growth rates diverged significantly from the national trend; this resulted in considerable market share re-alignments and sharpened the existing distributional non-uniformities. Finally, a discernible geographic pattern emerged during the sixties -- one region, the South, grew at a rate far in excess of the others.

STATE		TOTAL MOBILE HOME UNITS*	% CHANGE (1960-1970) (1970-1974)	% OF MOBILE HOUSING STOCK	NATIONAL RANK**
Alabama	1960	9,932		1.3	25
	1970	51,180	415.3	2.5	13
	1974	112,723	120.2	2.9	10
Alaska	1960	3,039		0.4	46
	1970	10,131	235.0	0.5	43
	1974	13,218	29.8	0.3	47
Arizona	1960	23,243		3.0	10
	1970	52,060	124.0	2.5	12
	1974	93,079	78.8	2.4	16
Arkansas	1960	4,880		0.6	43
	1970	29,526	505.0	1.4	25
	1974	60,470	104.8	1.6	26
California	1960	101,601		13.3	1
	1970	197,564	94.5	9.5	1
	1974	294,031	48.8	7.6	2
Colorado	1960	12,979		1.7	16
	1970	31,475	142.5	1.5	22
	1974	51,470	95.3	1.6	24
Connecticut	1960	6,456		0.8	37
	1970	9,542	47.8	0.5	45
	1974	10,720	12.3	0.3	48
Delaware	1960	3,569		0.5	45
	1970	9,001	152.2	0.4	48
	1974	16,429	82.5	0.4	44
District of Columbia	1960	77		0	50
	1970	281	265.0	0	50
	1974	802	185.4	0	50
Florida	1960	65,087		8.5	2
	1970	171,469	163.4	8.3	2
	1974	359,964	109.9	9.2	1

* Must be a year-round dwelling to be included

** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1
1974 Projections by PMHI (Footnote 1)

FIGURE 1: MOBILE HOME DISTRIBUTION BY STATE

STATE		TOTAL MOBILE HOME UNITS*	% CHANGE (1960-1970) (1970-1974)	% OF MOBILE HOUSING STOCK	NATIONAL RANK**
Georgia	1960	12,689		1.7	18
	1970	76,968	506.6	3.7	8
	1974	172,316	123.9	4.4	5
Hawaii	1960	25		0	51
	1970	163	552.0	0	51
	1974	693	325.2	0	51
Idaho	1960	6,763		0.9	36
	1970	15,854	134.6	0.8	36
	1974	29,048	83.1	0.7	34
Illinois	1960	32,470		4.2	5
	1970	73,404	126.1	3.5	10
	1974	111,564	52.0	2.9	11
Indiana	1960	27,994		3.7	9
	1970	68,158	143.5	3.3	11
	1974	107,901	58.3	2.8	13
Iowa	1960	11,735		1.5	20
	1970	24,259	106.7	1.2	30
	1974	41,141	69.6	1.1	31
Kansas	1960	11,783		1.5	19
	1970	26,985	129.0	1.3	29
	1974	48,661	80.3	1.2	28
Kentucky	1960	10,076		1.3	24
	1970	42,930	326.1	2.1	19
	1974	80,464	87.4	2.1	18
Louisiana	1960	9,445		1.2	28
	1970	38,524	307.9	1.8	20
	1974	67,609	75.5	1.7	19
Maine	1960	6,180		0.8	39
	1970	16,527	167.4	0.8	35
	1974	30,092	82.1	0.8	36

* Must be a year-round dwelling to be included
 ** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and
 1970 Census of Housing HC (1) - B1
 1974 Projections by PMHI (Footnote 1)

FIGURE 1: MOBILE HOME DISTRIBUTION BY STATE
 (cont.)

STATE		TOTAL MOBILE HOME UNITS*	% CHANGE (1960-1970) (1970-1974)	% OF MOBILE HOUSING STOCK	NATIONAL RANK**
Maryland	1960	9,521		1.2	27
	1970	20,263	112.8	1.0	32
	1974	27,534	35.9	0.7	35
Massachusetts	1960	6,766		0.9	35
	1970	10,862	60.5	0.5	41
	1974	14,425	32.8	0.4	45
Michigan	1960	29,400		3.8	8
	1970	75,161	155.6	3.6	9
	1974	148,540	97.6	3.8	7
Minnesota	1960	10,702		1.4	23
	1970	29,601	176.6	1.4	24
	1974	61,516	107.8	1.6	25
Mississippi	1960	6,327		0.8	38
	1970	30,492	380.1	1.5	23
	1974	71,603	134.8	1.8	22
Missouri	1960	16,613		2.2	13
	1970	50,892	206.3	2.5	14
	1974	93,712	83.9	2.4	15
Montana	1960	7,077		0.9	33
	1970	16,866	138.3	0.8	34
	1974	33,171	96.7	0.9	32
Nebraska	1960	7,115		0.9	32
	1970	14,961	110.3	0.7	38
	1974	28,169	88.3	0.9	37
Nevada	1960	8,025		1.0	31
	1970	20,652	157.4	1.0	31
	1974	32,889	59.2	0.8	33
New Hampshire	1960	2,896		0.4	47
	1970	12,598	341.1	0.6	39
	1974	20,756	64.8	0.5	40

* Must be a year-round dwelling to be included

** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1
1974 Projections by PMHI (Footnote 1)

FIGURE 1: MOBILE HOME DISTRIBUTION BY STATE
(cont.)

STATE		TOTAL MOBILE HOME UNITS*	% CHANGE		NATIONAL RANK**
			(1960-1970)	(1970-1974)	
New Jersey	1960	9,156			29
	1970	15,097	64.9	0.7	37
	1974	22,044	46.0	0.6	39
New Mexico	1960	12,937		1.7	17
	1970	18,983	46.7	0.9	33
	1974	40,060	111.0	1.0	30
New York	1960	31,306		4.1	7
	1970	77,661	148.1	3.7	7
	1974	129,085	66.2	3.3	9
North Carolina	1960	19,133		2.5	11
	1970	98,267	413.6	4.8	3
	1974	199,988	103.5	5.1	4
North Dakota	1960	5,017		0.7	42
	1970	9,613	91.6	0.5	44
	1974	18,118	88.5	0.5	42
Ohio	1960	42,892		5.6	3
	1970	86,160	100.9	4.1	6
	1974	141,171	63.8	3.6	8
Oklahoma	1960	8,086		1.1	30
	1970	27,449	239.5	1.3	27
	1974	58,584	113.4	1.5	27
Oregon	1960	14,090		1.8	15
	1970	37,741	167.9	1.8	21
	1974	72,634	92.5	1.9	20
Pennsylvania	1960	31,434		4.1	6
	1970	87,595	178.7	4.2	5
	1974	164,293	87.6	4.2	6
Rhode Island	1960	1,513		0.2	49
	1970	2,403	58.8	0.1	49
	1974	3,437	43.0	0.1	49

* Must be a year-round dwelling to be included

** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1
1974 Projections by PMHI (Footnote 1)

FIGURE 1: MOBILE HOME DISTRIBUTION BY STATE
(cont.)

STATE		TOTAL MOBILE HOME UNITS*	% CHANGE (1960-1970) (1970-1974)	% OF MOBILE HOUSING STOCK	NATIONAL RANK**
South Carolina	1960	11,072		1.4	21
	1970	50,471	355.8	2.4	16
	1974	112,114	122.1	2.9	12
South Dakota	1960	6,929		0.9	34
	1970	11,560	66.8	0.5	40
	1974	24,031	107.9	0.6	38
Tennessee	1960	9,792		1.3	26
	1970	48,615	396.5	2.3	17
	1974	101,174	101.8	2.6	14
Texas	1960	36,878		4.8	4
	1970	94,858	157.2	4.6	4
	1974	239,447	152.4	6.1	3
Utah	1960	4,858		0.6	44
	1970	9,133	88.0	0.4	47
	1974	21,133	131.4	0.5	41
Vermont	1960	2,335		0.3	48
	1970	9,484	306.2	0.5	46
	1974	14,735	55.4	0.4	46
Virginia	1960	17,257		2.3	12
	1970	50,598	193.2	2.4	15
	1974	89,279	76.4	2.3	17
Washington	1960	14,940		1.9	14
	1970	43,850	193.5	2.1	18
	1974	71,484	63.0	1.8	21
West Virginia	1960	5,245		0.7	41
	1970	26,877	412.4	1.3	28
	1974	47,909	76.3	1.2	29
Wisconsin	1960	11,064		1.4	22
	1970	28,705	159.4	1.4	26
	1974	63,179	120.1	1.6	23
Wyoming	1960	6,165		0.3	40
	1970	10,436	69.3	0.5	42
	1974	16,525	58.3	0.4	43
U.S.A.	1960	766,565		100.0	
	1970	2,073,994	170.6	100.0	
	1974	3,893,570	87.6	100.0	

*Must be a year-round dwelling to be included

** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and
 1970 Census of Housing HC (1) - B1
 1974 Projections by PMHI (Footnote 1)

FIGURE 1: MOBILE HOME DISTRIBUTION BY STATE
 (cont.)

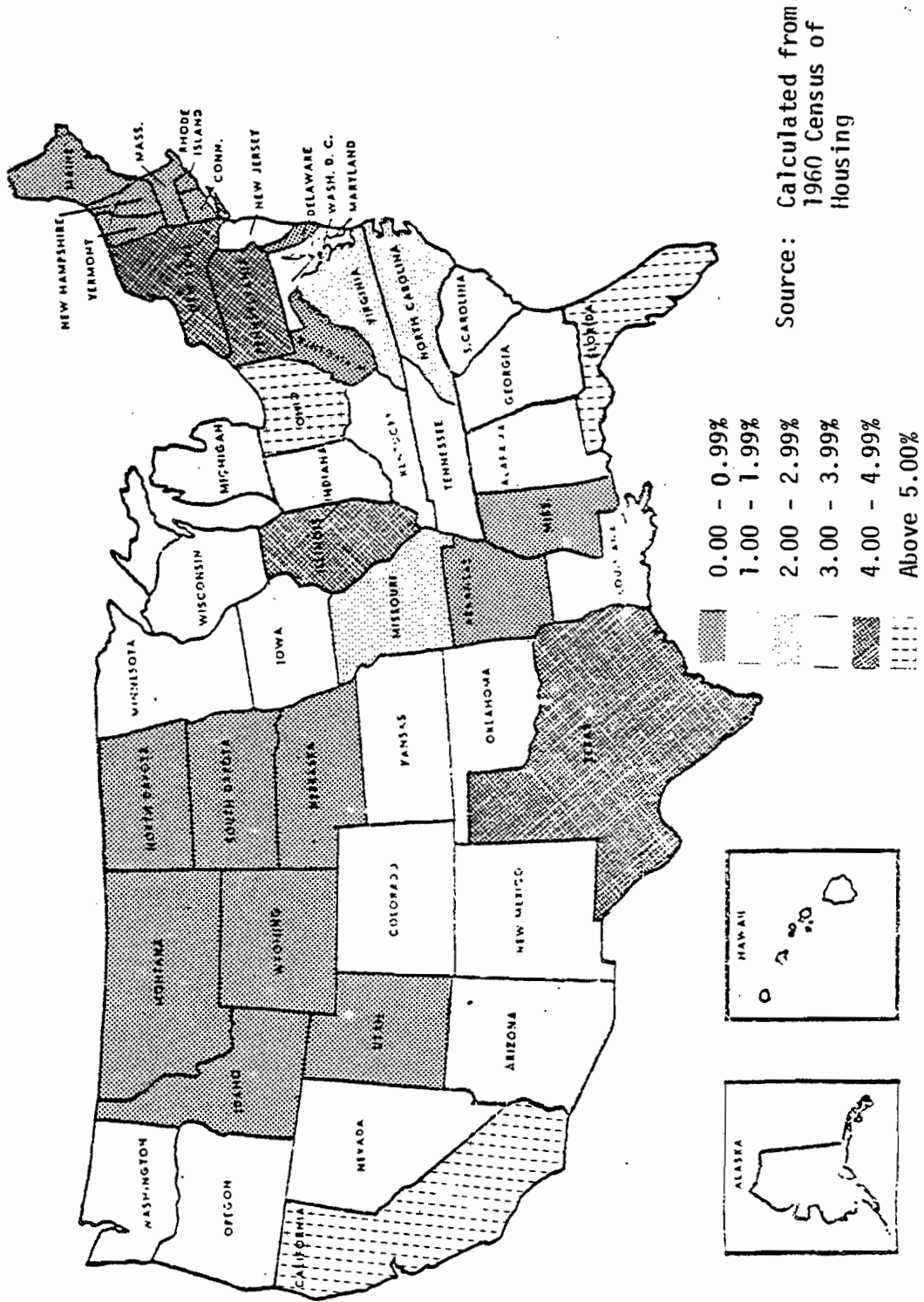


FIGURE 2: 1960 DISTRIBUTION OF MOBILE HOMES ACROSS THE NATION AS A PERCENT OF TOTAL MOBILE HOUSING STOCK

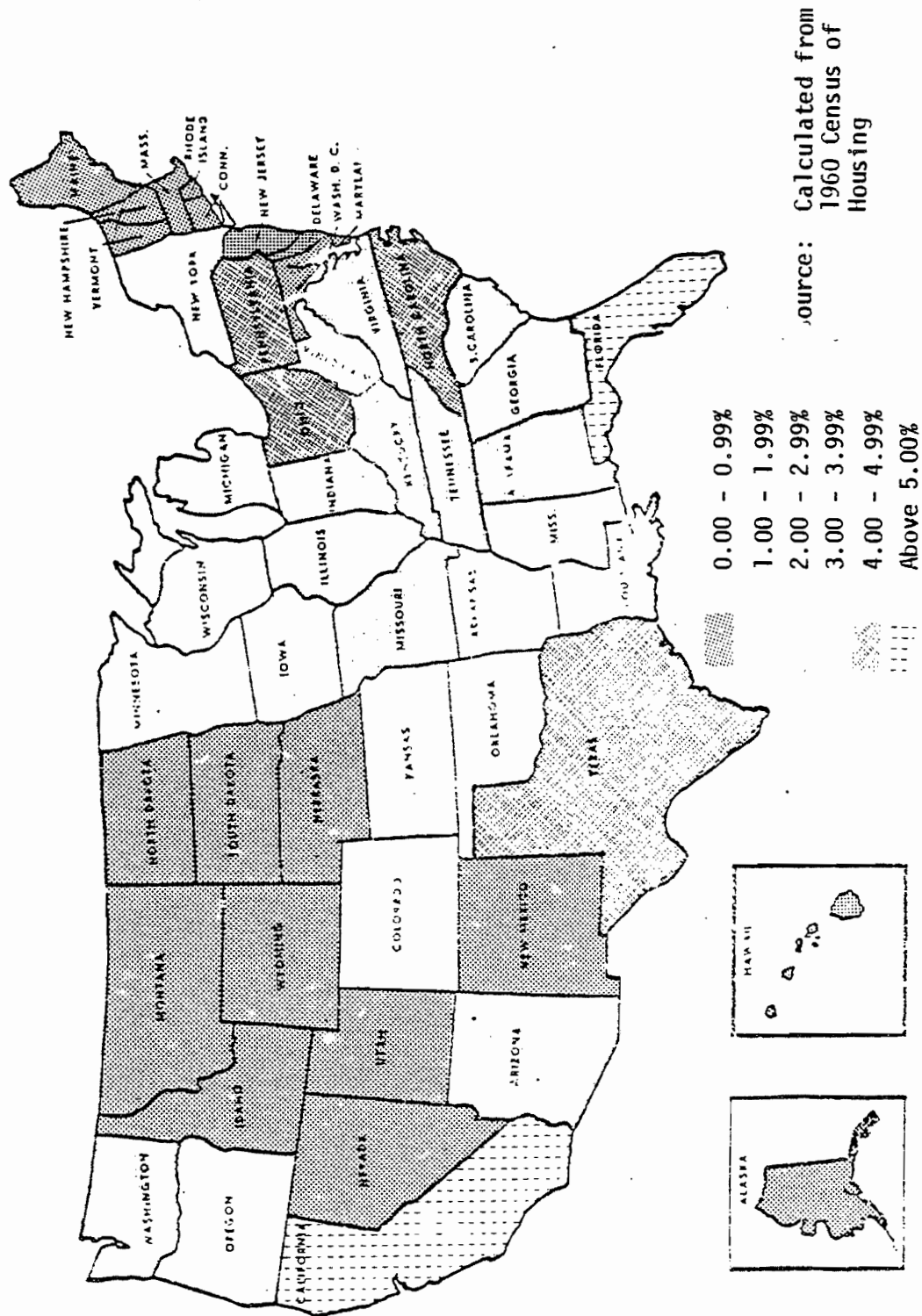


FIGURE 3: 1970 DISTRIBUTION OF MOBILE HOMES ACROSS THE NATION AS A PERCENT OF TOTAL MOBILE HOUSING STOCK

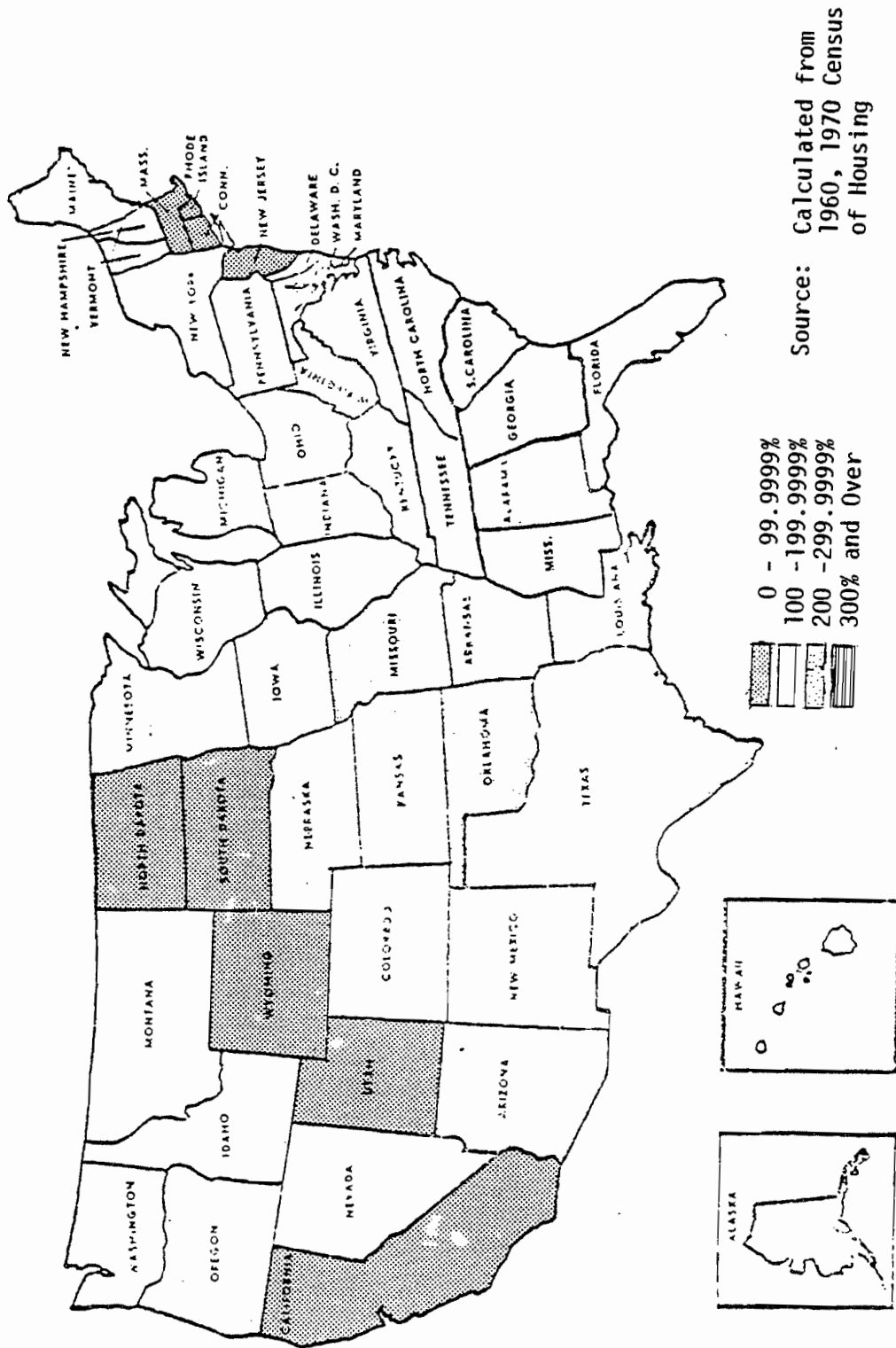


FIGURE 4: 1960-1970 GROWTH OF MOBILE HOMES BY STATE

REGION		TOTAL MOBILE HOME UNITS*	% CHANGE (1960-1970) (1970-1974)	% OF MOBILE HOUSING STOCK	NATIONAL RANK**
NORTHEAST	1960	98,042		12.8	IV
	1970	241,771	146.1	11.6	IV
	1974	409,587	69.4	10.5	IV
New England	1960	26,146		3.4	9
	1970	61,418	133.7	2.9	9
	1974	94,165	53.3	2.4	9
Middle Atlantic	1960	71,896		9.4	5
	1970	180,353	150.6	8.7	5
	1974	315,422	74.9	8.1	8
NORTH CENTRAL	1960	213,714		27.9	III
	1970	499,459	133.4	24.1	II
	1974	887,923	77.8	22.8	II
East North Central	1960	143,820		18.3	1
	1970	331,588	130.2	16.0	2
	1974	572,355	72.6	14.7	2
West North Central	1960	69,894		9.1	6
	1970	167,871	140.0	9.1	8
	1974	315,568	88.0	8.1	7
SOUTH	1960	239,066		31.2	I
	1970	867,768	263.2	41.9	I
	1974	1,818,209	109.5	46.7	I
South Atlantic	1960	143,650		18.7	2
	1970	504,194	251.1	24.3	1
	1974	1,026,135	103.5	26.4	1
East South Central	1960	36,127		4.7	8
	1970	173,217	380.8	8.4	7
	1974	365,964	111.3	9.4	5
West South Central	1960	59,289		7.7	7
	1970	190,357	220.9	9.2	4
	1974	426,110	123.8	10.9	4
WEST	1960	215,743		28.1	II
	1970	464,993	115.3	22.4	III
	1974	779,435	67.6	20.1	III
Mountain	1960	82,048		10.7	4
	1970	175,499	113.5	8.4	6
	1974	327,375	86.5	8.4	6
Pacific	1960	133,695		17.4	3
	1970	289,499	116.5	14.0	3
	1974	452,060	56.2	11.6	3

*Must be a year-round dwelling to be included

** Includes the District of Columbia

Compiled from: 1960 Census of Housing Volume I, Part 1 and

1970 Census of Housing HC (7) - 6

1974 Projections by PMHI (Footnote 1)

FIGURE 5: MOBILE HOME DISTRIBUTION BY REGIONS AND SUB-REGIONS

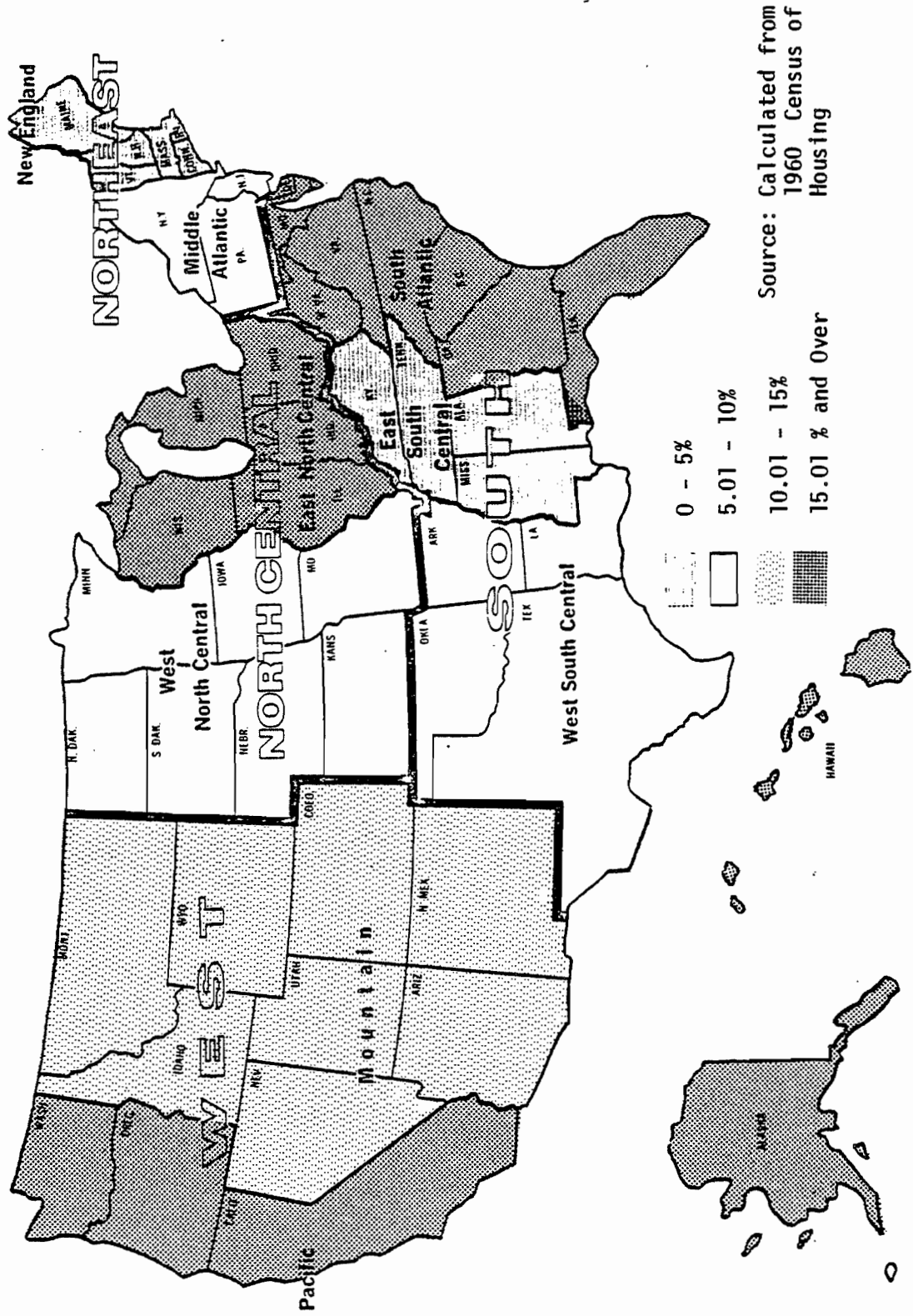


FIGURE 6: MOBILE HOME DISTRIBUTION BY SUB-REGION: 1960

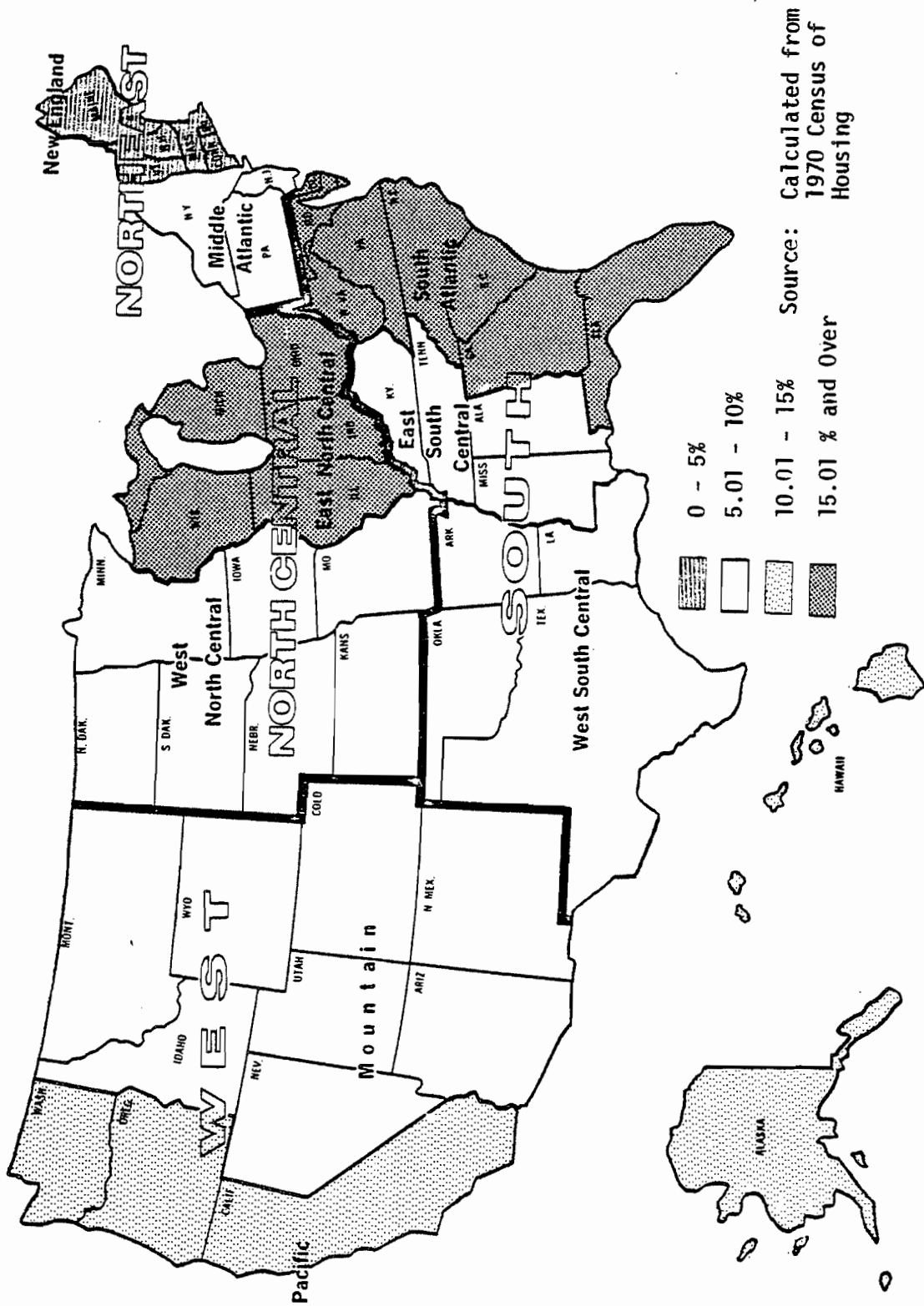


FIGURE 7: MOBILE HOME DISTRIBUTION BY SUB-REGION, 1970

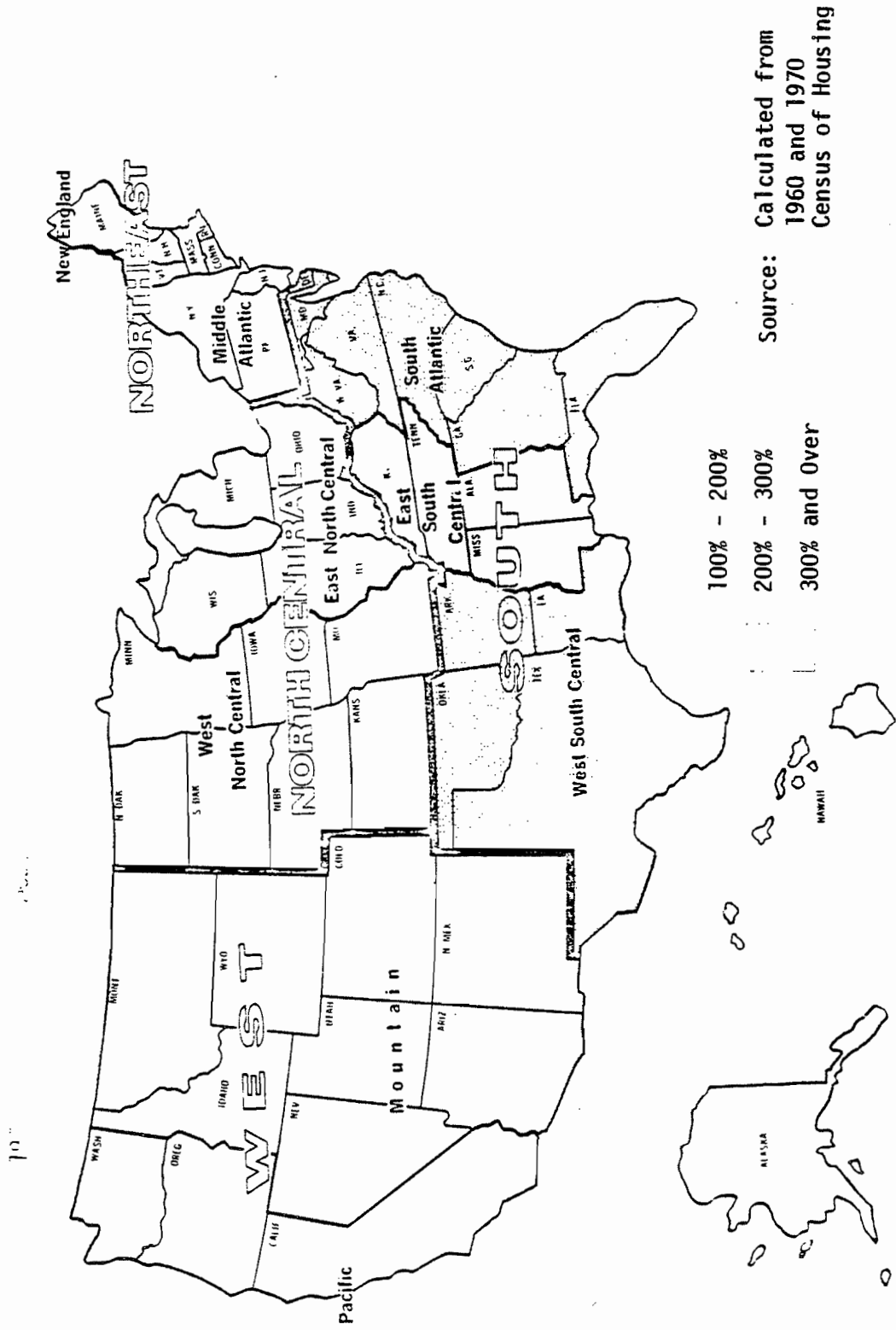


FIGURE 8: 1960-1970 GROWTH OF MOBILE HOMES BY REGION AND SUB-REGION

1.1.2 The Contribution of Mobile Homes to Total Housing

The distribution of mobile homes across the United States does not give an indication of the contribution of mobile homes to the total housing stock for the nation or for specific areas within the nation. To obtain an index which better reflects the "significance" of mobile homes, calculations have been made from 1960 and 1970 census data. Percentages were obtained of the total national year-round housing stock represented by mobile homes for regions, sub-regions, and individual states. The results are found in Figures 9 and 13.

1970 Contribution of Mobile Homes by State

The key feature which emerges from Figure 9 is that the contribution of mobile homes to the total housing stock varies sharply from state to state. Several states showed at least 9.0% of all units as mobile homes; other states showed virtually no mobile home contribution.

For example, in Nevada 12.0% of all units in 1970 were mobile homes. In Alaska, mobile homes accounted for 11.4%. By contrast, in 1970 there were six states in which mobile homes comprised 1.0% or less of the total housing stock. The District of Columbia and Hawaii were the principal examples in this group with only a 0.1% incidence. For the nation as a whole mobile homes comprise 3.1% of the total housing stock.

Changing State Patterns: 1960-1970

A comparison of the data for 1960 with 1970 reveals an expanded role for the mobile home in most states and for the nation as a whole. In 1960 the mobile home accounted for 2.0% of all housing in the United States; in 1970 it accounted for 3.1%. In 1960 at least 3.0% of the total housing stock in nine of the fifty states including the District of Columbia were mobile homes; by 1970 the number of states with this proportion had risen to thirty-three. In 1960 the mobile home comprised at least 5.0% of the total housing stock in only three states; in 1970 there were sixteen states in this category.

The increasing role of the mobile home from 1960 to 1970 was widespread, but it was not all-pervasive. The District of Columbia, Hawaii, Massachusetts, New Jersey, Rhode Island, and Connecticut experienced increases in percentage of total units of less than 0.3%. Though the increased contribution of the mobile home in these states was slight, there was no state in which the contribution declined.

1970 Contribution of Mobile Homes by Region

Focusing on the contribution of mobile homes, the question of possible regional variations develops. Figure 13 provides the data which addresses this topic, indicating that regional differences do exist. In the South, 4.2% of all year-round dwelling units were mobile homes. In the Northeast, mobile homes accounted for only 1.5%.

Sharper distinctions were drawn when the sub-region figures were tabulated. In the Mountain states and South Atlantic states, mobile homes provided at least 5.0% of the units (6.4% and 5.0% respectively). In contrast to those two areas were the New England and Mid-Atlantic states where mobile homes accounted for only 1.6% and 1.5% of the total units, respectively.

Changing Regional Pattern: 1960-1970

Having noted the existence of a regional pattern in 1970, was this significantly different from the patterns of 1960, and if so, in what way? Figure 13 provides some answers to such questions.

According to Figure 13, there was a very non-uniform manner in which the increased contribution of the mobile home was distributed regionally. The Southern states showed the most significant gains (+2.8%), while the Northeast gained very little (+0.8%). On a sub-regional basis, the greatest increases achieved by the mobile home were found in the South Atlantic (3.2%) and East South Central states (3.2%). The Mountain states also registered a sizable increase (2.7%).

From these figures, it appears that the areas in which the mobile home made its most significant contribution did not change from 1960 to 1970 though the patterns of regional differences have been more sharply drawn. Again the South is the clear leader.

Summary

The role of the mobile home has increased from 1960 to 1970 in many states and has been negligible in certain other states. To the extent that regional patterns exist, the tendency seems to be toward the strengthening of these existing regional patterns.

STATE		TOTAL HOUSING UNITS	ONE UNIT HOUSING*	MOBILE HOMES OR TRAILERS**	% MOBILE HOMES TOTAL HOUSING UNITS	RANK
ALABAMA	1960	967,498-	853,908	9,932	1.0	33-39
	1970	1,114,045	924,427	51,407	4.6	19
	PERCENT CHANGE	+15.2	+8.3	+417.6	+3.6	
ALASKA	1960	67,157-	43,257	3,039	4.5	5
	1970	88,555	45,450	10,111	11.4	2
	PERCENT CHANGE	+31.9	+5.1	+232.7	+6.9	
ARIZONA	1960	415,760-	347,822	23,243	5.6	2
	1970	578,771	422,501	52,247	9.0	3-4
	PERCENT CHANGE	+39.2	+21.5	+124.9	+3.4	
ARKANSAS	1960	586,516-	538,614	4,880	0.8	44-45
	1970	672,961	574,303	29,665	4.4	21-22
	PERCENT CHANGE	+14.7	+1.7	+507.9	+3.6	
CALIFORNIA	1960	5,464,885-	4,081,443	101,591	1.9	14-16
	1970	6,976,261	4,675,488	197,358	2.8	35
	PERCENT CHANGE	+27.7	+14.6	+94.3	+0.9	
COLORADO	1960	594,408	465,824	12,979	2.2	13
	1970	742,858	533,039	31,147	4.2	23
	PERCENT CHANGE	+25.0	+14.2	+140.0	+2.0	
CONNECTICUT	1960	818,428	512,107	6,456	0.8	44-45
	1970	958,615	572,286	9,605	1.0	46
	PERCENT CHANGE	+18.4	+11.8	+48.8	+0.2	
DELAWARE	1960	143,699-	120,348	3,569	2.5	11
	1970	174,990	132,125	9,001	5.1	14-15
	PERCENT CHANGE	+21.9	+9.8	+152.2	+2.6	
DISTRICT OF COL.	1960	262,639-	105,302	77	0.0	50-51
	1970	278,390	102,337	246	0.1	50-51
	PERCENT CHANGE	+6.0	-2.8	+219.5	+0.1	
FLORIDA	1960	1,776,945-	1,196,176-	65,087	3.7	6
	1970	2,490,830	1,728,559	172,100	6.9	6
	PERCENT CHANGE	+40.2	+23.8	+164.4	+3.2	
GEORGIA	1960	1,169,871-	979,203-	12,689	1.1	30-32
	1970	1,465,687	1,097,812	76,435	5.2	13
	PERCENT CHANGE	+25.4	+12.1	+502.4	+4.1	
HAWAII	1960	165,399-	121,774-	25	0.0	50-51
	1970	215,892	139,596	161	0.1	50-51
	PERCENT CHANGE	+30.5	+15.0	+544.0	+0.1	
IDAHO	1960	223,533-	193,026-	6,763	3.0	8-9
	1970	238,293	191,589	15,939	6.7	7
	PERCENT CHANGE	+6.6	-.7	+135.7	+3.7	
ILLINOIS	1960	3,274,982-	2,029,405-	32,470	1.0	33-39
	1970	3,692,447	2,187,179	73,757	2.0	42-43
	PERCENT CHANGE	+12.7	+7.8	+127.2	+1.0	
INDIANA	1960	1,503,031	1,279,488-	27,994	1.9	14-16
	1970	1,711,696	1,335,054	67,963	4.0	25
	PERCENT CHANGE	+13.9	+9.3	+142.8	+2.1	
IOWA	1960	905,271-	787,596-	11,735	1.3	24-25
	1970	954,975	780,507	24,235	2.5	37-39
	PERCENT CHANGE	+5.5	-.9	+106.9	+1.2	
KANSAS	1960	740,244-	647,143-	11,783	1.6	19-20
	1970	787,508	642,900	26,690	3.4	28-29
	PERCENT CHANGE	+6.4	-.7	+126.5	+1.8	
KENTUCKY	1960	925,383-	801,929-	9,076	1.1	30-32
	1970	1,060,689	895,970	43,291	4.1	24
	PERCENT CHANGE	+14.6	+5.5	+377.0	+3.0	

* Includes one unit detached plus one unit attached

** Must be a year-round dwelling to be included

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1

FIGURE 9: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY STATES:
1960-1970, 1960-1970 PERCENTAGE CHANGE

STATE		TOTAL HOUSING UNITS	ONE UNIT HOUSING*	MOBILE HOMES OR TRAILERS**	% MOBILE HOMES TOTAL HOUSING UNITS	RANK
LOUISIANA	1960	978,361	810,470-	5,445	1.0	33-39
	1970	1,146,105	893,411	38,305	3.3	30
	PERCENT CHANGE	+17.1	+10.2	+305.6	+2.3	
MAINE	1960	354,603	270,368-	6,180	1.7	17-18
	1970	339,440	230,913	16,250	4.8	17-18
	PERCENT CHANGE	-6.9	-14.6	+162.9	+3.1	
MARYLAND	1960	934,251-	742,318-	9,521	1.0	33-39
	1970	1,234,620	850,071	20,343	1.6	44
	PERCENT CHANGE	+32.2	+14.5	+113.7	+0.6	
MASSACHUSETTS	1960	1,690,850-	910,509-	6,765	0.4	49
	1970	1,839,028	926,323	10,928	0.6	49
	PERCENT CHANGE	+8.8	+1.7	+61.5	+0.2	
MICHIGAN	1960	2,548,373-	2,074,674-	28,400	1.2	28-29
	1970	2,845,448	2,160,483	75,012	2.6	36
	PERCENT CHANGE	+11.7	+4.1	+164.1	+1.4	
MINNESOTA	1960	1,106,775-	884,911-	10,502	1.0	33-39
	1970	1,219,591	891,882	29,740	2.4	40
	PERCENT CHANGE	+9.2	+8	+180.5	+1.4	
MISSISSIPPI	1960	628,945-	569,036-	6,327	1.0	33-39
	1970	697,271	596,768	30,581	4.4	21-22
	PERCENT CHANGE	+10.9	+4.9	+383.3	+3.4	
MISSOURI	1960	1,491,273-	1,047,549-	16,613	1.1	30-32
	1970	1,665,506	1,226,647	52,678	3.1	31
	PERCENT CHANGE	+11.7	+17.1	+206.3	+2.0	
MONTANA	1960	233,285-	186,214-	7,077	3.0	8-9
	1970	240,755	178,394	16,935	7.0	5
	PERCENT CHANGE	+3.2	-4.2	+135.3	+4.0	
NEBRASKA	1960	472,915-	396,010-	7,115	1.5	21-23
	1970	511,473	405,372	14,838	2.9	34
	PERCENT CHANGE	+8.2	+2.5	+108.5	+1.4	
NEVADA	1960	101,546-	73,110-	8,326	7.9	1
	1970	171,658	103,149	20,520	12.0	1
	PERCENT CHANGE	+69.0	+41.1	+155.7	+4.1	
NEW HAMPSHIRE	1960	224,420	160,820-	2,896	1.3	25-27
	1970	248,799	158,047	12,621	5.1	14-15
	PERCENT CHANGE	+10.9	-1.7	+335.8	+3.8	
NEW JERSEY	1960	1,998,456	1,126,037-	9,156	0.5	45-48
	1970	2,305,293	1,334,468	15,025	0.7	48
	PERCENT CHANGE	+15.4	+16.5	+64.1	+0.2	
NEW MEXICO	1960	281,892	242,592-	72,937	4.6	4
	1970	322,294	252,388	16,911	5.9	11
	PERCENT CHANGE	+14.3	+8.2	+46.2	+1.3	
NEW YORK	1960	5,693,681	2,443,956-	31,306	0.5	46-48
	1970	6,159,314	2,483,716	77,550	1.3	45
	PERCENT CHANGE	+8.2	+1.6	+147.7	+0.8	
NORTH CAROLINA	1960	1,322,839	1,198,754-	18,133	1.4	24-25
	1970	1,519,548	1,333,579	98,474	6.1	10
	PERCENT CHANGE	+22.4	+11.2	+493.1	+4.7	
NORTH DAKOTA	1960	194,597	160,178-	5,017	2.6	10
	1970	200,465	148,152	9,645	4.8	17-18
	PERCENT CHANGE	+3.0	-7.5	+92.2	+2.2	
OHIO	1960	3,040,952	2,362,472-	42,892	1.4	24-25
	1970	3,447,860	2,479,741	65,324	2.5	37-39
	PERCENT CHANGE	+13.4	+4.8	+100.1	+1.1	

* Includes one unit detached plus one unit attached

** Must be a year-round dwelling to be included

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1

FIGURE 9: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY STATES:
(cont) 1960-1970, 1960-1970 PERCENTAGE CHANGE

STATE		TOTAL HOUSING UNITS	ONE UNIT HOUSING*	MOBILE HOMES OR TRAILERS**	% MOBILE HOMES TOTAL HOUSING UNITS	RANK
OKLAHOMA	1960	815,609	735,523-	8,086	1.0	33-39
	1970	937,815	796,031	27,600	2.9	34
	PERCENT CHANGE	+15.0	+8.2	+241.3	+1.9	
OREGON	1960	622,726	524,854-	13,090	2.3	12
	1970	735,631	565,700	37,801	5.0	16
	PERCENT CHANGE	+18.1	+7.8	+168.8	+2.7	
PENNSYLVANIA	1960	3,581,046	2,914,810-	31,434	0.9	40-43
	1970	3,880,102	2,816,131	87,571	2.3	41
	PERCENT CHANGE	+8.4	-3.4	+178.6	+1.4	
RHODE ISLAND	1960	286,712	151,217	1,513	0.5	46-48
	1970	307,399	158,724	2,338	0.8	47
	PERCENT CHANGE	+7.2	+5.0	+54.5	+0.3	
SOUTH CAROLINA	1960	678,355	608,561-	11,072	1.6	19-20
	1970	804,058	666,690	50,211	6.2	9
	PERCENT CHANGE	+18.6	+9.6	+353.5	+4.6	
SOUTH DAKOTA	1960	216,449	184,406-	6,929	3.2	7
	1970	221,636	177,266	11,637	5.3	12
	PERCENT CHANGE	+2.4	-3.9	+68.0	+2.1	
TENNESSEE	1960	1,084,322	956,946-	9,792	0.9	40-43
	1970	1,297,000	1,036,340	48,418	3.7	26
	PERCENT CHANGE	+19.6	+8.3	+394.5	+2.8	
TEXAS	1960	3,152,953	2,760,059-	36,878	1.2	28-29
	1970	3,809,086	3,057,493	94,687	2.5	37-39
	PERCENT CHANGE	+20.8	+10.8	+156.8	+1.3	
UTAH	1960	262,582	209,871	4,858	1.9	14-16
	1970	311,982	234,344	9,189	2.9	34
	PERCENT CHANGE	+18.8	+11.7	+89.2	+1.0	
VERMONT	1960	136,307	102,284	2,335	1.7	17-18
	1970	149,762	90,460	9,354	6.3	8
	PERCENT CHANGE	+9.9	-3.7	+301.0	+4.6	
VIRGINIA	1960	1,168,641	973,372	17,257	1.5	21-23
	1970	1,404,952	1,109,621	50,421	3.4	28-29
	PERCENT CHANGE	+27.1	+14.0	+192.2	+1.9	
WASHINGTON	1960	1,009,484	823,907	14,940	1.5	21-23
	1970	1,204,902	910,493	43,978	3.6	27
	PERCENT CHANGE	+19.4	+10.5	+194.4	+2.1	
WEST VIRGINIA	1960	574,354	517,580	5,245	0.9	40-43
	1970	592,845	489,435	27,123	4.6	19-20
	PERCENT CHANGE	+3.2	-5.4	+417.1	+3.7	
WISCONSIN	1960	1,288,499	977,175	11,064	0.9	40-43
	1970	1,416,427	998,092	28,474	2.0	42-43
	PERCENT CHANGE	+9.9	+2.1	+157.4	+1.1	
WYOMING	1960	113,080	87,715-	6,165	5.5	3
	1970	114,572	85,163	10,256	9.0	3-4
	PERCENT CHANGE	+1.3	-2.9	+66.4	+3.5	
U.S.A.	1960	58,314,784	43,785,566	766,565	2.0	
	1970	67,699,078	46,845,551	2,072,867	3.1	
	PERCENT CHANGE	+16.1	+7.1	+170.4	+1.1	

* Includes one unit detached plus one unit attached

** Must be a year-round dwelling to be included

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC(1) - B1

FIGURE 9: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY STATES:
(cont) 1960-1970, 1960-1970 PERCENTAGE CHANGE

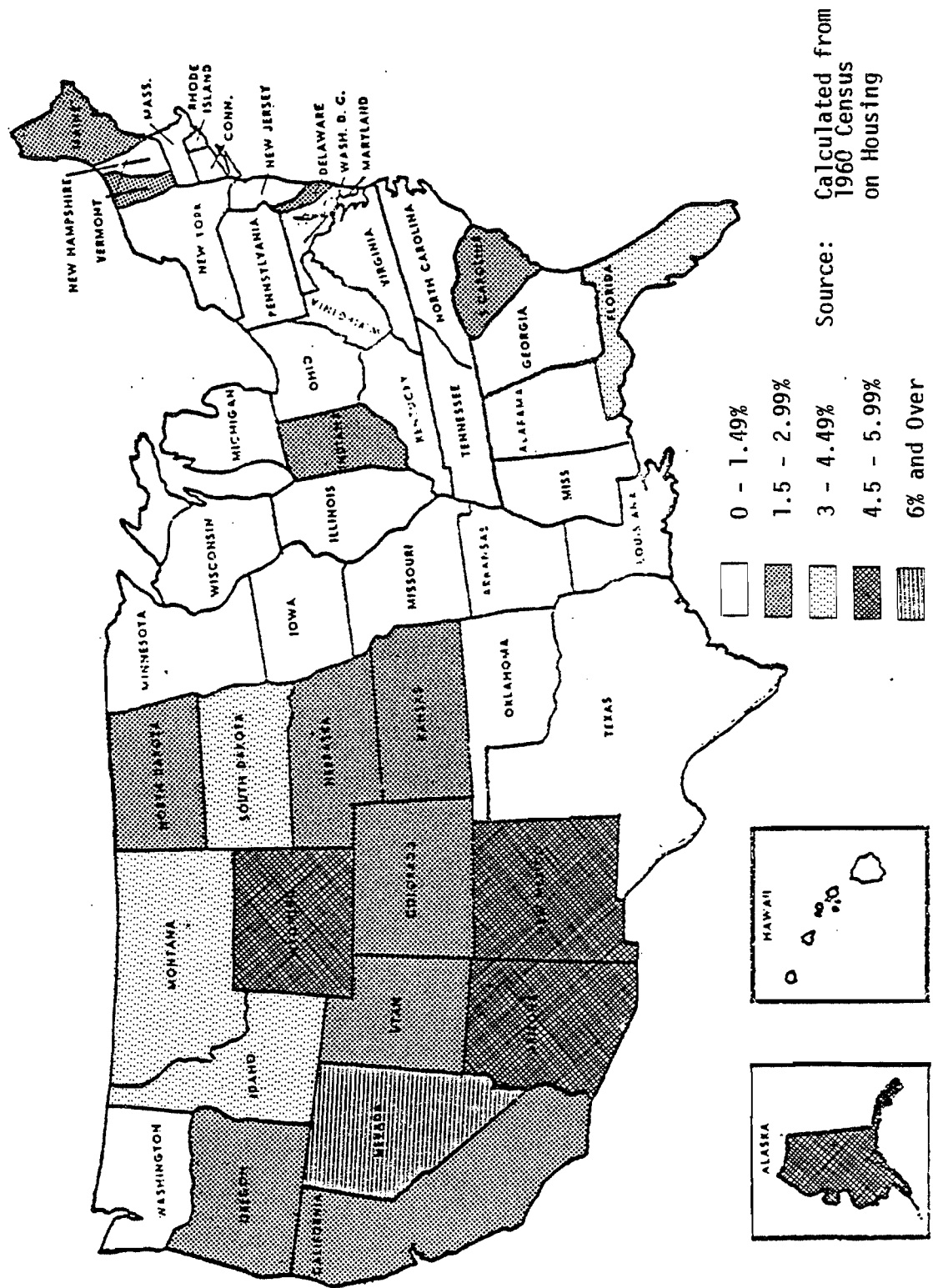


FIGURE 10: 1960 PERCENTAGE OF MOBILE HOMES TO TOTAL HOUSING UNITS

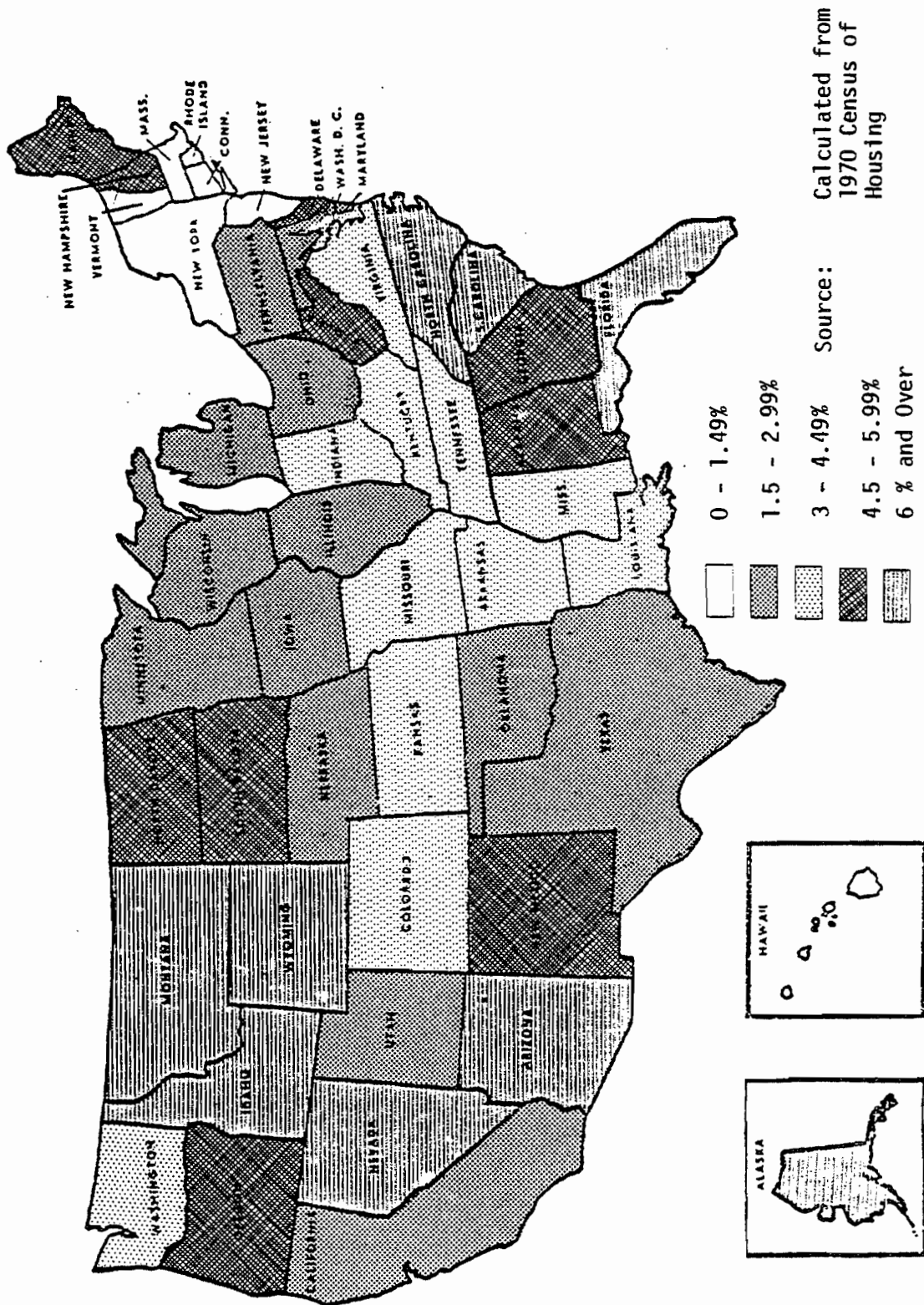


FIGURE 11: 1970 PERCENTAGE OF MOBILE HOMES TO TOTAL HOUSING UNITS

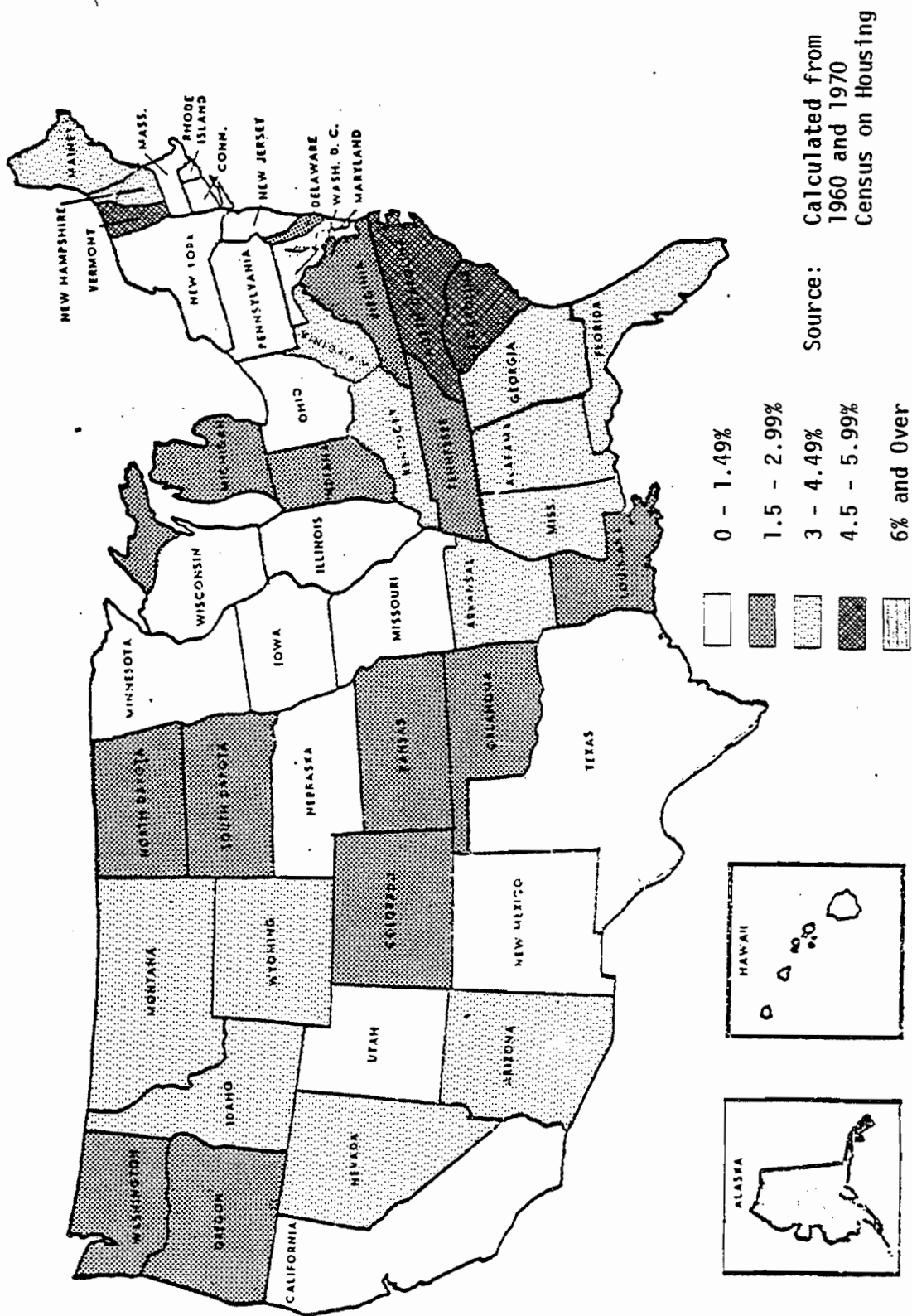


FIGURE 12: 1960-1970 CHANGE: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY STATES

<u>REGIONAL</u>				
	<u>Total year-round housing units</u>	<u>Mobile home units</u>	<u>% of total housing units</u>	<u>Rank</u>
I. NORTHEAST				
1960	14,507,801	98,042	0.7	IV
1970	16,197,862	241,262	1.5	IV
%	+ 11.6	+ 146.1	+ 0.8	
A. New England				
1960	3,234,618	26,146	0.8	8
1970	3,853,153	61,106	1.6	8
%	+ 19.1	+ 133.7	+ 0.8	
B. Middle Atlantic				
1960	11,273,183	71,896	0.6	9
1970	12,344,709	180,156	1.5	9
%	+ 9.5	+ 150.6	+ 0.9	
II. NORTH CENTRAL				
1960	16,793,361	213,714	1.3	III
1970	18,675,232	498,763	2.7	III
%	+ 11.2	+ 133.4	+ 1.4	
A. East North Central				
1960	11,655,837	143,820	1.2	5
1970	13,114,078	331,050	2.5	7
%	+ 12.5	+ 130.2	+ 1.3	
B. West North Central				
1960	5,137,524	69,894	1.4	4
1970	5,561,154	167,713	3.0	5
%	+ 8.2	+ 140.0	+ 1.6	
III. SOUTH				
1960	17,171,181	239,066	1.4	II
1970	20,883,566	868,309	4.2	I
%	+ 21.6	+ 263.2	+ 2.8	

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC (1) - B1

FIGURE 13: REGIONAL SIGNIFICANCE OF MOBILE HOUSING UNITS

	<u>Total year-round housing units</u>	<u>Mobile home units</u>	<u>% of total housing units</u>	<u>Rank</u>
A. South Atlantic				
1960	8,031,594	143,650	1.8	2
1970	10,147,788	504,354	5.0	2
%	+ 26.3	+ 251.1	+ 3.2	
B. East South Central				
1960	3,606,148	36,127	1.0	7
1970	4,169,805	173,697	4.2	3
%	+ 15.6	+ 380.8	+ 3.2	
C. West South Central				
1960	5,533,439	59,289	1.1	6
1970	6,565,973	190,258	2.9	6
%	+ 18.7	+ 220.9	+ 1.8	
IV. WEST				
1960	9,555,729	215,743	2.3	I
1970	11,942,424	464,553	3.9	II
%	+ 25.0	+ 115.3	+ 1.6	
A. Mountain				
1960	2,226,086	82,048	3.7	1
1970	2,721,183	175,144	6.4	1
%	+ 22.2	+ 213.5	+ 2.7	
B. Pacific				
1960	7,329,643	133,695	1.8	3
1970	9,221,241	289,409	3.1	4
%	+ 25.8	+ 116.5	+ 1.3	

Compiled from: 1960 Census of Housing Volume I, Part 1 and
1970 Census of Housing HC (1) - B1

FIGURE 13: REGIONAL SIGNIFICANCE OF MOBILE HOUSING UNITS
(cont)

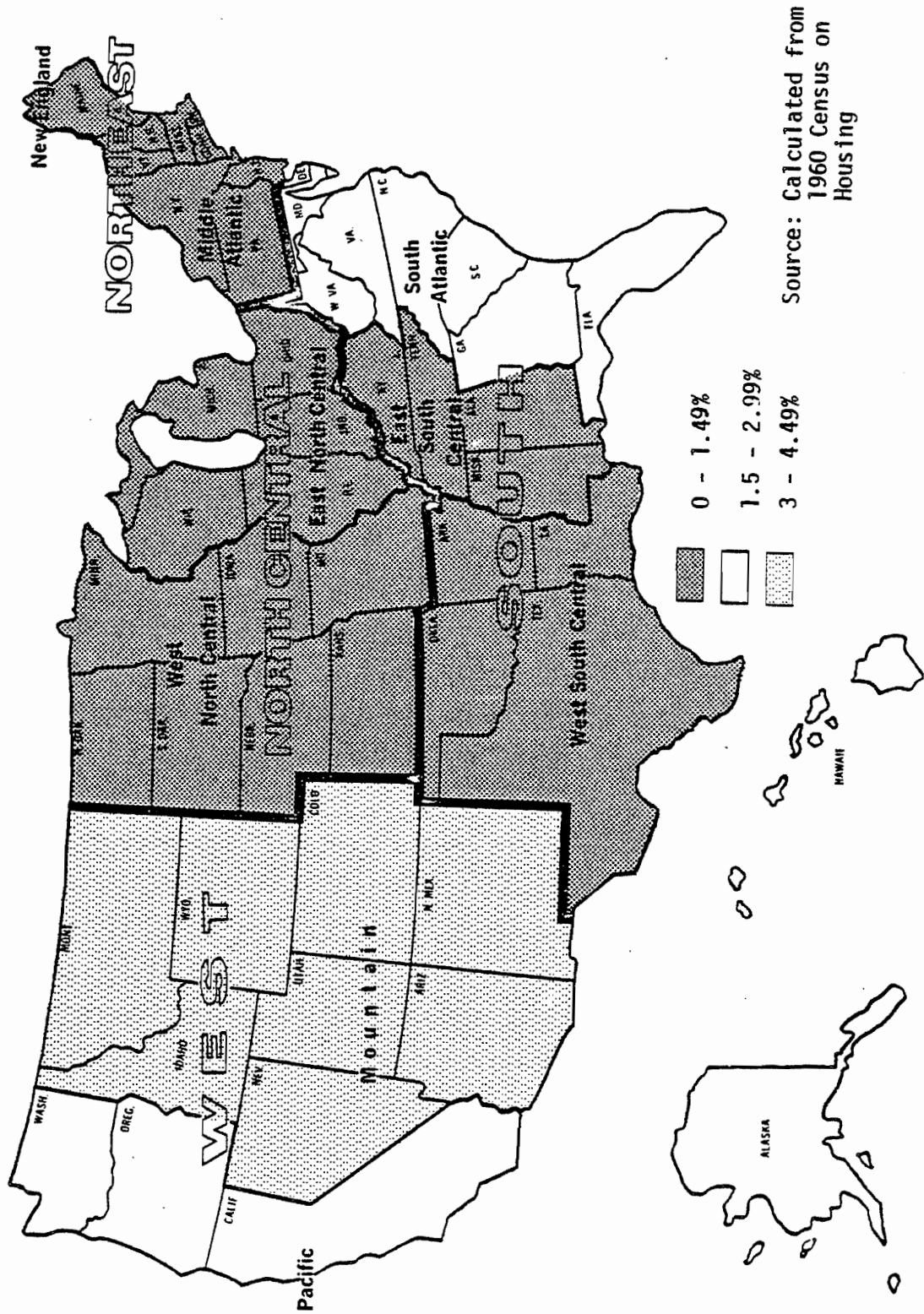


FIGURE 14: 1960: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY SUB-REGIONS

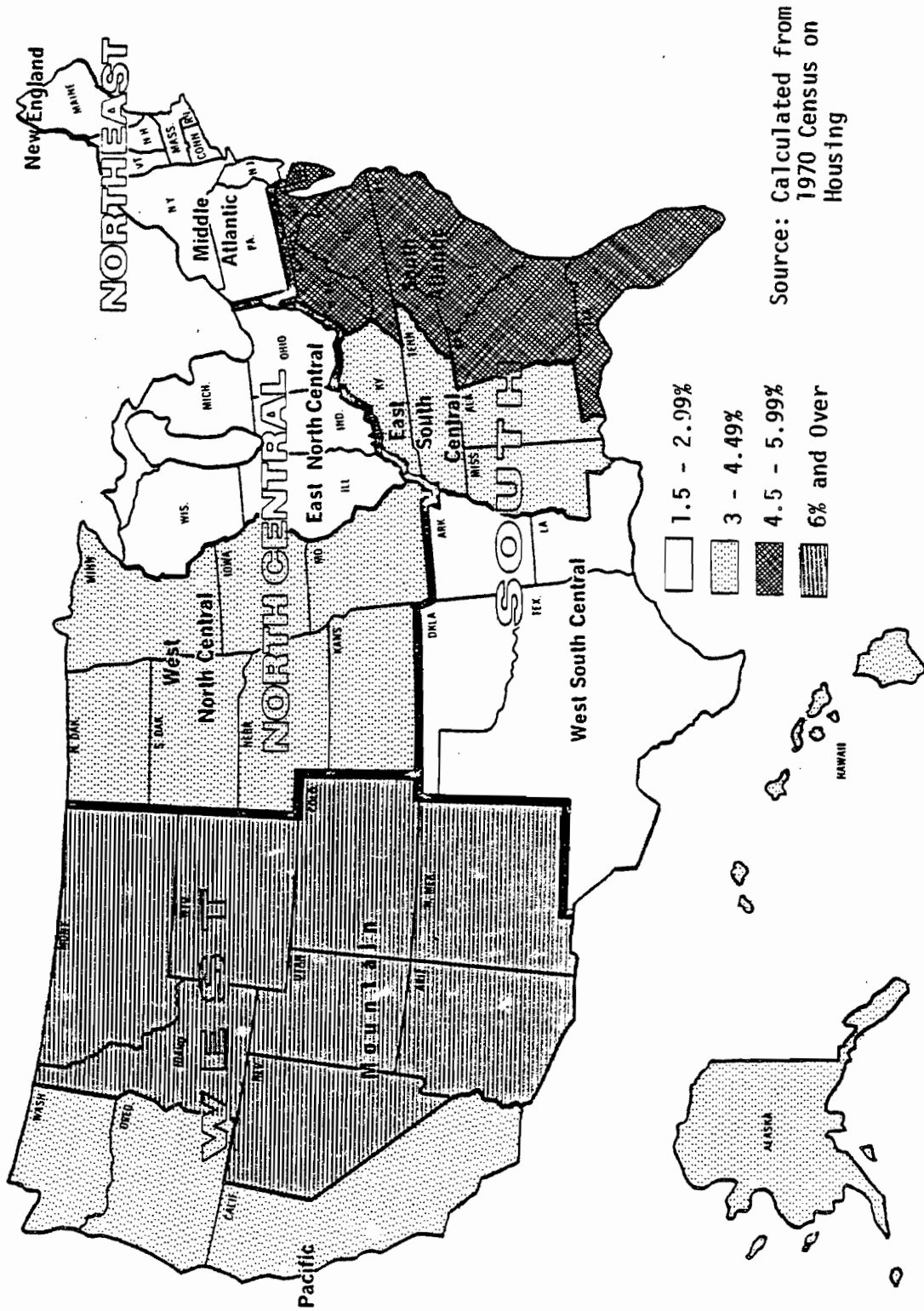


FIGURE 15: 1970: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY SUB-REGIONS

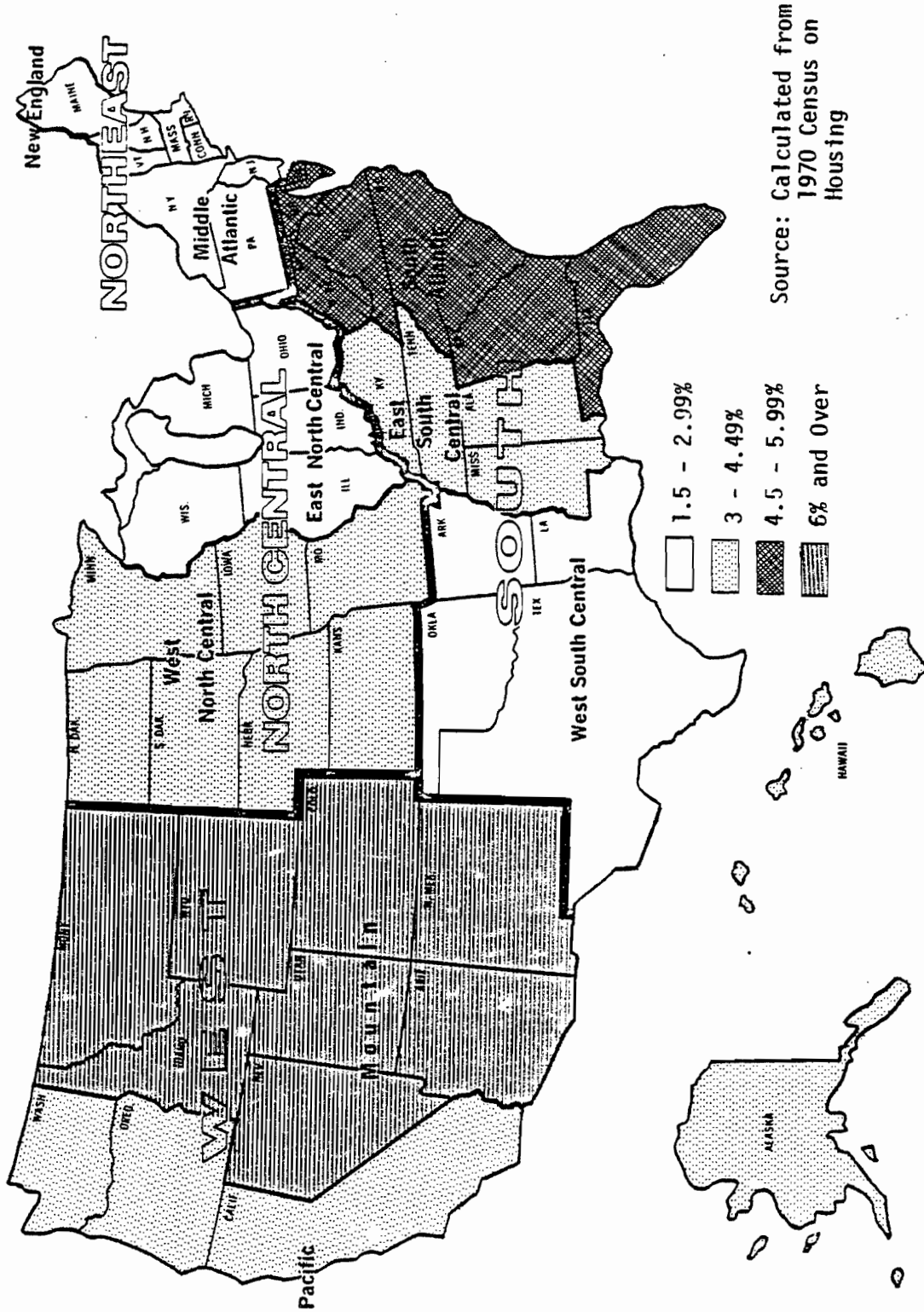


FIGURE 15: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY SUB-REGIONS

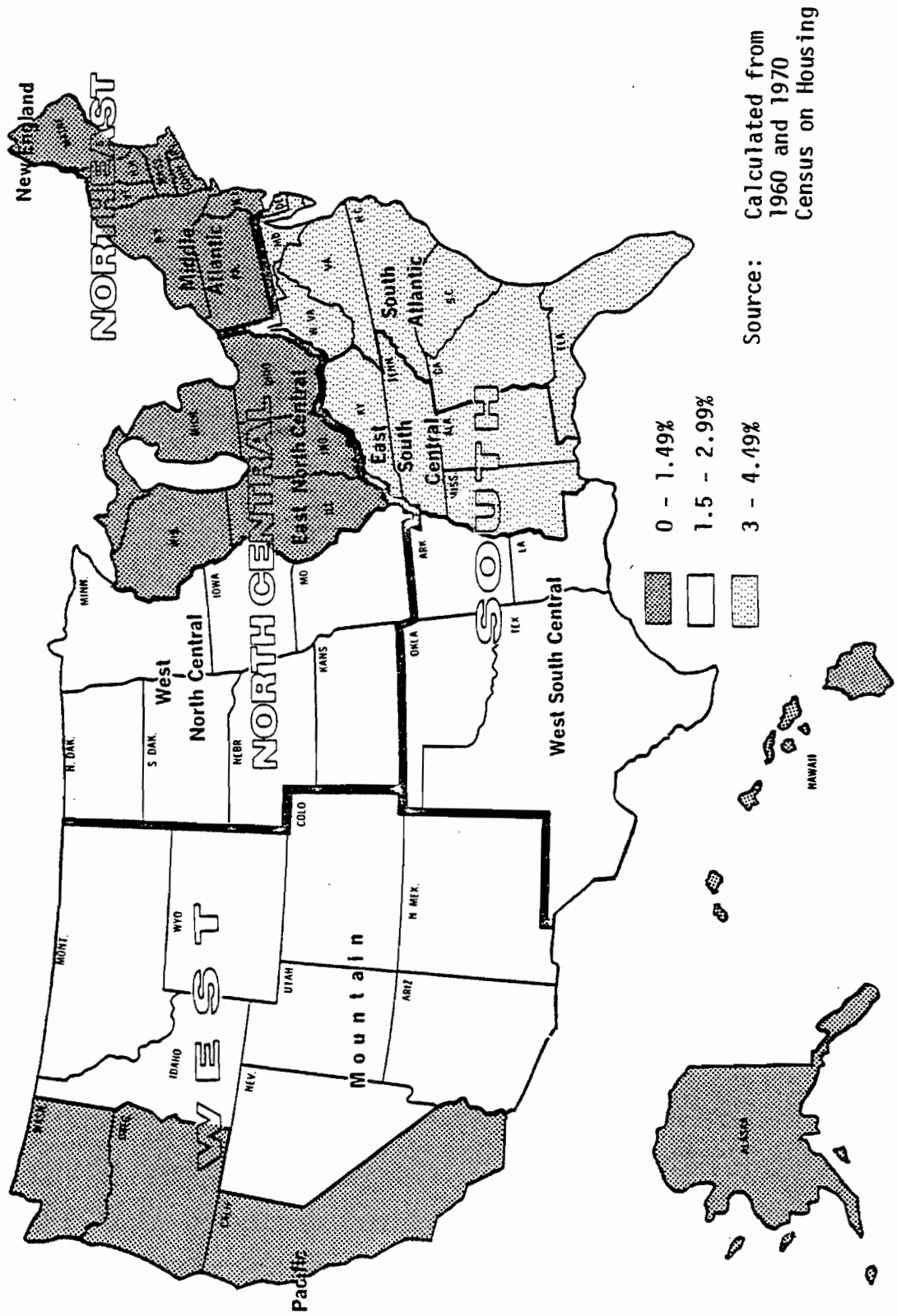


FIGURE 16: 1960-1970 CHANGE: MOBILE HOMES AS PERCENTAGE OF TOTAL HOUSING UNITS BY SUB-REGION

1.1.3 Distribution of Mobile Homes Within States

The focus thus far has been on the distribution of mobile homes across the nation. The way in which mobile homes were distributed within states now deserves examination. More specifically, it is useful to investigate the urban vs. rural location pattern of the mobile home dweller. To do this, 1970 Census data is used as a basis for the calculations found in Figures 17 through 26.

Distribution Urban vs. Rural: 1970 and Trends 1960-1970

As Figure 17 indicates, most mobile homes were located outside of areas designated "urban." In 1970, only 39.1 percent were found in urban areas. This contrasts sharply with the pattern in 1970 for all year-round housing units when 73.9 percent were listed as urban.

In addition, the percentage of mobile homes found in urban areas has been steadily declining over the past two decades. According to the 1950 census data, approximately 55 percent of all mobile homes were found in urban areas. By 1960 the figure had dropped to 48.5 percent and in 1970 to 39.1 percent. Again this contrasts sharply with the trend for all year-round units which has experienced a rise in the percentage found in urban areas --from 69.9 percent in 1960 to 73.9 percent in 1970.

These statistics have certain implications regarding the contribution of mobile homes to the total housing stock in various areas within each state.

In particular, it would be expected that the contribution of mobile homes is far less in urban than in rural areas; this is, in fact, the case. In 1970 mobile homes accounted for only 1.6 percent of all urban housing units, but in rural areas mobile homes accounted for 7.1 percent of all units. The contribution of mobile homes varies within states as well as across the states.

Another indication of the distribution of mobile homes within states comes from 1970 Census data aggregated according to Standard Metropolitan Statistical Area (S.M.S.A.) boundaries. These figures (found in Figure 17) indicate a pattern in 1970 very similar to the one cited above. In 1970, 45 percent of all mobile homes were found inside an S.M.S.A.. Of this number, only one-third were located inside the central city. Therefore, in 1970 nine out of ten mobile homes in the nation were located outside the central city. To the extent that this phenomenon may be explained by the presence of highly restrictive land use controls and rising land prices etc., the attention of the reader is directed to the section on land use controls in Volume V.

Regional Variation

Figure 18 indicates that the urban/rural distributional pattern identified for the nation as a whole is not applicable in at least one region and several sub-regions. Specifically, in the Western region the urban/rural pattern is reversed. In 1970, 56.5 percent of all mobile homes were located in urban rather than rural areas. S.M.S.A. figures yield the same pattern - 60.2 percent located inside an S.M.S.A..

It is worth noting that this pattern results from the domination of the region by the Pacific States and, in particular, the state of California (see Figures 19 and 21) where 82.5 percent of its mobile homes are found inside an S.M.S.A. and 71.2 percent in urban areas.

Summary

Recent data reveals that the distribution of mobile homes varies within states as well as across states. Mobile homes are usually found outside of urban areas and almost always outside of the central city. The mobile home's contribution to the total housing stock is much less in the urban areas than in rural areas. Finally, notable regional exceptions on this pattern exist in some of the Western states--California being the most important example.

	Year-Round Units #	Mobile Home Units #
TOTAL UNITS	67,699,084	2,072,887
I URBAN		
#	50,002,480	810,900
%	73.9	39.1
II RURAL		
#	17,696,604	1,261,987
%	26.1	60.9
NONFARM		
#	14,601,925	1,124,437
%	21.6	54.2
OCCUPIED FARM		
#	3,094,679	137,550
%	4.6	6.6
I INSIDE SMSA'S		
#	46,082,602	932,721
%	68.1	45.0
IN CENTRAL CITY		
#	22,566,060	174,387
%	33.3	8.4
NOT IN CENTRAL CITY		
#	23,516,542	758,334
%	34.8	36.6
II OUTSIDE SMSA'S		
#	21,616,482	1,140,166
%	31.9	55.0

FIGURE 17: 1970 DISTRIBUTION OF MOBILE HOMES WITHIN THE STATES--
NATIONAL TOTALS

	URBAN			RURAL				% of Total
	Total	% of Total	Total	% of Total	Nonfarm	% of Total	Occupied Farm	
Northeast	53,923	22.4	187,339	77.6	171,707	71.2	15,632	6.4
New England	19,196	31.4	41,910	68.6	39,010	63.8	2,900	4.8
Mid-Atlantic	34,727	19.3	145,429	80.7	132,697	73.7	12,732	7.0
North Central	195,639	39.2	303,024	60.8	260,886	52.3	42,138	8.5
East No. Central	130,434	39.4	200,516	60.6	175,095	52.9	25,521	7.7
West No. Central	65,205	38.9	102,508	61.1	85,891	51.2	16,617	9.9
South	298,659	34.4	569,650	65.6	511,444	58.9	58,206	6.7
South Atlantic	162,868	32.3	341,486	67.7	309,236	61.3	32,250	6.4
East So. Central	47,121	27.1	126,576	72.9	111,773	64.3	14,803	8.6
West So. Central	88,670	46.6	101,588	53.4	90,435	47.5	11,153	5.9
West	262,679	56.5	201,874	43.5	180,300	38.8	21,574	4.7
Mountain	88,540	50.6	86,604	49.4	76,760	43.8	9,844	5.6
Pacific	174,139	60.2	115,270	39.8	103,540	35.8	11,730	4.0

Source: IIC (1) - B Detailed Housing Characteristics - 1970 Census

FIGURE 18: DISTRIBUTION URBAN VS. RURAL -- BY REGION AND SUB-REGION
U.S. YEAR-ROUND MOBILE HOME UNITS

	URBAN				RURAL			
	Total	% of Total	Total	% of Total	Nonfarm	% of Total	Occupied Farm	% of Total
Northeast								
New England	19,196	31.4	41,910	68.6	39,010	63.8	2,900	4.8
Connecticut	4,535	47.2	5,070	52.8	4,633	48.2	437	4.6
Maine	4,381	27.0	11,869	73.0	11,025	67.8	844	5.2
Massachusetts	5,047	46.2	5,881	53.8	5,302	46.5	579	5.3
New Hampshire	3,645	28.9	8,976	71.1	8,521	67.5	455	3.6
Rhode Island	1,084	46.4	1,254	53.6	1,131	48.3	123	5.3
Vermont	504	5.4	8,860	94.6	8,398	89.2	462	4.9
Mid-Atlantic	34,727	19.3	145,429	80.7	132,697	73.6	12,732	7.1
New Jersey	7,322	48.7	7,703	51.3	6,608	44.0	1,095	7.3
New York	12,565	16.2	64,995	83.8	59,829	77.1	5,166	6.7
Pennsylvania	14,840	16.9	72,731	83.1	66,260	75.7	6,471	7.4
Totals	53,923	22.4	187,339	77.6	171,707	71.1	15,632	6.5
North Central								
E. North Central	130,434	39.4	200,516	60.6	175,095	52.9	25,521	7.7
Illinois	37,859	51.3	35,898	48.7	30,592	41.5	5,306	7.2
Indiana	24,216	35.6	43,767	64.4	38,057	56.0	5,710	8.4
Michigan	26,329	35.1	48,633	64.9	43,334	57.8	5,339	7.1
Ohio	34,807	40.6	51,017	59.4	45,257	52.7	5,760	6.7
Wisconsin	7,323	25.7	21,151	74.3	17,845	62.4	3,406	11.9
W. North Central	65,205	38.9	102,508	61.1	85,391	51.2	16,617	9.9
Iowa	10,820	44.6	13,465	55.4	11,148	45.9	2,317	9.5
Kansas	11,726	43.9	14,962	56.1	12,551	47.4	2,311	8.7
Minnesota	12,120	40.7	17,620	59.3	14,485	48.2	3,135	10.5
Missouri	16,249	31.9	34,629	68.1	30,509	60.0	4,120	8.1
Nebraska	6,289	42.4	8,549	57.6	6,937	46.7	1,612	10.9
North Dakota	3,374	35.0	6,271	65.0	4,621	47.9	1,650	17.1
South Dakota	4,625	39.7	7,012	60.3	5,540	47.6	1,472	12.7
Totals	155,639	39.2	303,024	60.8	260,986	52.4	42,138	8.4

Source: HC(1) - B Detailed Housing Characteristics- 1970 Census

FIGURE 19: DISTRIBUTION URBAN VS. RURAL - BY STATE
U.S. YEAR-ROUND MOBILE HOME UNITS

South	URBAN		RURAL		RURAL		Occupied Farm	% of Total
	Total	% of Total	Total	% of Total	Nonfarm	% of Total		
South Atlantic	162,868	32.3	341,486	67.7	309,236	61.3	32,250	6.4
Delaware	1,606	17.8	7,395	82.2	6,520	72.4	875	9.8
D. C.	246	100.0	--	--	--	--	--	--
Florida	91,655	53.3	80,445	46.7	72,535	42.1	7,910	4.6
Georgia	17,599	23.0	58,836	77.0	53,844	70.5	4,992	6.5
Maryland	4,689	23.0	15,654	77.0	14,252	70.1	1,402	6.9
North Carolina	15,367	15.6	83,107	84.4	73,868	75.0	9,239	9.4
South Carolina	13,352	26.6	36,859	73.4	34,087	67.9	2,772	5.5
Virginia	14,404	28.6	36,017	71.4	32,481	64.4	3,536	7.0
West Virginia	3,950	14.6	23,173	85.4	21,649	79.8	1,524	5.6
E. South Central	47,121	27.1	125,576	72.9	111,773	64.4	14,803	8.5
Alabama	14,974	29.1	36,433	70.9	34,422	65.0	3,011	5.9
Kentucky	9,854	22.8	33,437	77.2	28,245	65.2	5,192	12.0
Mississippi	8,078	26.4	22,503	73.6	19,911	65.1	2,592	8.5
Tennessee	14,215	29.4	34,203	70.6	30,195	62.3	4,008	8.3
West South Central	88,670	46.6	101,588	53.4	90,435	47.5	11,153	5.9
Arkansas	9,325	31.4	20,341	68.6	17,835	60.1	2,506	8.5
Louisiana	13,280	34.7	25,025	65.3	22,591	59.0	2,434	6.3
Oklahoma	12,569	45.5	15,031	54.5	13,291	48.2	1,740	6.3
Texas	53,496	56.5	41,191	43.5	36,718	38.8	4,473	4.1
Totals	289,659	34.4	569,650	65.6	511,444	58.9	58,206	6.7
West								
Mountain	88,540	50.6	86,604	49.4	76,750	43.6	9,844	5.6
Arizona	30,663	58.7	21,584	41.3	19,517	37.4	2,067	3.9
Colorado	16,155	51.9	14,992	48.1	13,041	41.9	1,951	6.3
Idaho	5,410	33.9	10,529	66.1	9,111	59.2	1,418	8.9
Montana	5,312	31.4	11,623	68.6	9,927	58.6	1,696	10.0
Nevada	12,617	61.5	7,903	38.5	7,319	35.7	584	2.8
New Mexico	9,758	51.6	9,153	48.4	8,316	44.0	387	4.4
Utah	5,553	60.4	3,636	39.6	3,250	35.4	386	4.2
Wyoming	3,072	30.0	7,184	70.0	6,279	61.2	905	8.8
Pacific	174,139	60.2	115,270	39.8	103,540	35.8	11,730	4.0
Alaska	3,071	30.4	7,040	69.6	6,868	57.9	172	1.7
California	140,483	71.2	56,875	28.8	51,260	26.0	5,615	2.8
Hawaii	114	70.8	47	29.2	41	25.5	6	3.7
Oregon	12,849	34.0	24,952	66.0	21,400	56.6	3,552	9.4
Washington	17,622	40.1	26,356	59.9	23,971	54.5	2,385	5.4
Totals	262,679	56.5	201,874	43.5	180,300	38.8	21,574	4.7

Source: HC(1) - B Detailed Housing Characteristics- 1970 Census
 FIGURE 19: DISTRIBUTION URBAN VS. RURAL - BY STATE
 (cont) U.S. YEAR-ROUND MOBILE HOME UNITS

	Total	Totals	Inside SMSA	% of Total	Outside SMSA	% of Total
Northeast	241,262		108,129	44.8	133,133	55.2
New England		61,106	16,337	26.7	44,769	73.3
Mid-Atlantic		180,156	91,792	51.0	88,364	49.0
North Central	498,763		215,688	43.2	283,075	56.8
East No. Central		331,050	162,946	49.2	168,104	50.8
West No. Central		167,713	52,742	31.4	114,971	68.6
South	868,309		329,311	37.9	538,998	62.1
South Atlantic		504,354	192,242	38.1	312,112	61.9
East So. Central		173,697	45,384	26.1	128,313	73.9
West So. Central		190,258	91,685	48.2	98,573	51.8
West	464,553		279,593	60.2	184,960	39.8
Mountain		175,144	77,545	44.3	97,599	55.7
Pacific		289,409	202,048	69.8	87,361	30.2

Source: HC (1) - B Detailed Housing Characteristics - 1970 Census

FIGURE 20: DISTRIBUTION SMSA VS. OUTSIDE - SMSA - BY REGION AND SUB-REGION
U. S. YEAR - ROUND MOBILE HOME UNITS

	Totals	Inside SMSA	% of Total	Outside SMSA	% of Total
Northeast					
New England	61,106	16,337	26.7	44,769	73.3
Connecticut	9,605	6,378	66.4	3,227	33.6
Maine	16,250	846	5.2	15,404	94.8
Massachusetts	10,928	6,160	56.4	4,768	43.6
New Hampshire	12,621	1,628	12.9	10,993	87.1
Rhode Island	2,338	1,325	56.7	1,013	43.3
Vermont	9,364	--	--	9,364	100.0
Mid-Atlantic	180,156	91,792	51.0	88,364	49.0
New Jersey	15,025	9,523	63.4	5,502	36.6
New York	77,560	34,557	44.6	43,003	55.4
Pennsylvania	87,571	47,712	54.5	39,859	45.5
Totals	241,262	108,129	44.8	133,133	55.2
North Central					
E. North Central	331,050	162,946	49.2	168,104	50.8
Illinois	73,757	38,874	52.7	34,883	47.3
Indiana	67,983	29,520	43.4	38,463	56.6
Michigan	75,012	38,920	51.9	36,092	48.1
Ohio	85,824	47,410	55.3	38,414	44.7
Wisconsin	28,474	8,222	28.9	20,252	71.1
W. North Central	167,713	52,742	31.4	114,971	68.6
Iowa	24,285	7,972	32.8	16,313	67.2
Kansas	26,690	8,494	31.8	18,196	68.2
Minnesota	29,740	10,685	35.9	19,055	64.1
Missouri	50,878	19,786	38.9	31,092	61.1
Nebraska	14,838	3,740	25.2	11,098	74.8
North Dakota	9,645	975	10.1	8,670	89.9
South Dakota	11,637	1,090	9.4	10,547	90.6
Totals	498,753	215,688	43.2	283,075	56.8

Source: HC(1)- B Detailed Housing Characteristics - 1970 Census

FIGURE 2]: DISTRIBUTION SMSA VS. OUTSIDE - SMSA - BY STATE
U.S. YEAR - ROUND MOBILE HOME UNITS

	Totals	Inside SMSA	% of Total	Outside SMSA	% of Total
<u>South</u>					
South Atlantic	504,354	192,242	38.1	312,112	61.9
Delaware	9,001	2,565	28.5	6,436	71.5
D. C.	246	246	100.0	--	--
Florida	172,100	84,746	49.2	87,354	50.8
Georgia	76,435	19,981	26.1	56,454	73.9
Maryland	20,343	10,927	53.7	9,416	46.3
North Carolina	98,474	30,661	31.1	67,813	68.9
South Carolina	50,211	19,601	39.0	30,610	61.0
Virginia	50,421	17,479	34.7	32,942	65.3
West Virginia	27,123	6,036	22.3	21,087	77.7
E. South Central	173,697	45,384	25.1	128,313	73.9
Alabama	51,407	18,055	35.1	33,352	64.9
Kentucky	43,291	7,916	18.3	35,375	81.7
Mississippi	30,581	5,257	17.2	25,324	82.8
Tennessee	48,418	14,156	29.2	34,262	70.8
West South Central	190,258	91,685	48.2	98,573	51.8
Arkansas	29,666	7,867	26.5	21,799	73.5
Louisiana	38,305	12,626	33.0	25,679	67.0
Oklahoma	27,600	11,018	39.9	16,582	60.1
Texas	94,687	60,174	63.6	34,513	36.4
Totals	868,309	329,311	37.9	538,998	62.1
<u>West</u>					
Mountain	175,144	77,545	44.3	97,599	55.7
Arizona	52,247	34,133	65.3	18,114	34.7
Colorado	31,147	14,753	47.4	16,155	51.9
Idaho	15,939	2,428	15.2	13,511	84.8
Montana	16,935	2,921	17.2	14,014	82.8
Nevada	20,520	14,864	72.4	5,656	27.6
New Mexico	18,911	3,886	20.5	15,025	79.5
Utah	9,189	4,560	49.6	4,629	50.4
Wyoming	10,256	--	--	10,256	100.0
Pacific	289,409	202,048	69.8	87,361	30.2
Alaska	10,111	--	--	10,111	100.0
California	197,358	162,882	82.5	34,476	17.5
Hawaii	161	85	52.8	76	47.2
Oregon	37,801	16,497	43.6	21,304	56.4
Washington	43,978	22,584	51.4	21,394	48.6
Totals	464,553	279,593	60.2	184,960	39.8

Source: HC(1) - B Detailed Housing Characteristics- 1970 Census

FIGURE 21: DISTRIBUTION SMSA VS. OUTSIDE - SMSA - BY STATE
(cont) U.S. YEAR-ROUND MOBILE HOME UNITS

		Owner Occupied		Renter Occupied	
		# Yr-Round Units	# Mobile Home Units	# Yr-Round Units	# Mobile Home Units
TOTAL UNITS		39,885,545	1,751,682	23,559,647	321,205
I	URBAN	# 27,785,109 69.7	# 675,227 38.5	# 19,782,263 84.0	# 135,673 42.2
II	RURAL	# 12,100,436 30.3	# 1,076,455 61.5	# 3,777,384 16.0	# 185,532 57.8
	NONFARM	# 9,608,376 24.1	# 956,176 54.6	# 3,174,765 13.5	# 168,261 52.4
	OCCUPIED FARM	# 2,492,060 6.2	# 120,279 6.9	# 602,619 2.6	# 17,271 5.4
I	INSIDE SMSA'S	# 26,089,540 65.4	# 794,058 45.3	# 17,769,238 75.4	# 138,663 43.2
	IN CENTRAL CITY	# 10,287,803 25.8	# 142,549 8.1	# 11,090,905 47.1	# 31,838 9.9
	NOT IN CENTRAL CITY	# 15,801,737 39.6	# 651,509 37.2	# 6,678,330 28.3	# 106,825 33.3
II	OUTSIDE SMSA'S	# 13,796,005 34.6	# 957,624 54.7	# 5,790,412 24.6	# 182,542 56.8

FIGURE 22: OCCUPANCY STATUS

	URBAN		RURAL				% of Total	
	Total	% of Total	Total	% of Total	Nonfarm	% of Total		Occupied Farm
Northeast	46,020	22.1	162,637	77.9	148,538	71.2	14,099	6.7
New England	16,938	31.7	36,421	68.3	33,759	63.7	2,662	5.0
Mid-Atlantic	29,082	18.7	126,216	81.3	114,779	73.9	11,437	7.4
North Central	165,779	38.7	262,446	61.3	224,750	52.5	37,696	8.8
East No. Central	110,437	38.8	174,448	61.2	151,514	53.2	22,934	8.0
West No. Central	55,342	38.6	87,998	61.4	73,236	51.1	14,762	10.3
South	237,090	33.0	480,410	67.0	429,877	59.9	50,533	7.1
South Atlantic	131,024	31.0	286,090	69.0	257,995	61.4	28,095	7.6
East So. Central	34,570	24.4	107,395	75.6	94,398	66.5	12,997	9.1
West So. Central	71,496	45.1	86,925	54.9	77,484	48.9	9,441	6.0
West	226,338	57.0	170,962	43.0	153,011	38.5	17,951	4.5
Mountain	74,061	50.5	72,592	49.5	64,501	44.0	8,091	5.5
Pacific	152,277	60.8	98,370	39.2	88,510	35.3	9,860	3.9

Source: IIC (1) - B Detailed Housing Characteristics - 1970 Census

FIGURE 23: DISTRIBUTION URBAN VS. RURAL - BY REGION AND SUB-REGION
U.S. OWNER OCCUPIED MOBILE HOME UNITS

	Total	Totals	Inside SMSA	% of Total	Outside SMSA	% of Total
Northeast	208,657		93,100	44.6	115,557	55.4
New England		53,359	44,435	27.1	38,924	72.9
Mid-Atlantic		155,298	78,665	50.7	76,633	49.3
North Central	428,225		187,275	43.7	240,950	56.3
East No. Central		284,885	141,293	49.6	143,592	50.4
West No. Central		143,340	45,982	32.1	97,358	67.9
South	717,500		271,916	37.9	445,584	62.1
South Atlantic		420,114	154,532	36.8	259,582	63.2
East So. Central		141,965	37,000	26.1	104,965	73.9
West So. Central		158,421	77,384	48.8	81,037	51.2
West	397,300		241,767	60.9	155,533	39.1
Mountain		146,653	65,840	44.9	80,813	55.1
Pacific		250,647	175,927	70.2	74,720	29.8

Source: HC (1) - B Detailed Housing Characteristics - 1970 Census

FIGURE 24: DISTRIBUTION S.M.S.A. VS. OUTSIDE S.M.S.A. - BY REGION AND SUB-REGION
U.S. OWNER OCCUPIED MOBILE HOME UNITS

	URBAN		RURAL					% of Total
	Total	% of Total	Total	% of Total	Nonfarm	% of Total	Occupied Farm	
Northeast	7,903	24.2	24,702	75.8	23,169	71.1	1,533	4.7
New England	2,258	29.1	5,489	70.9	5,251	67.8	238	3.1
Mid-Atlantic	5,645	22.7	19,213	77.3	17,918	72.1	1,295	5.2
North Central	29,860	42.3	40,678	57.7	36,236	51.4	4,442	6.3
East No. Central	19,997	43.3	26,168	56.7	23,581	51.1	2,587	5.6
West No. Central	9,863	40.5	14,510	59.5	12,655	51.9	1,855	7.6
South	61,569	40.8	89,240	59.2	81,567	54.1	7,673	5.1
South Atlantic	31,844	36.5	55,396	63.5	51,241	58.7	4,155	4.8
East So. Central	12,551	39.6	19,181	60.4	17,375	54.8	1,806	5.2
West So. Central	17,174	53.9	14,663	46.1	12,951	40.7	1,712	5.4
West	36,341	54.0	30,912	46.0	27,289	40.6	3,623	5.4
Mountain	14,479	50.8	14,012	49.2	12,259	43.0	1,753	6.2
Pacific	21,862	56.4	16,900	43.6	15,030	38.8	1,870	4.8

Source: HC (1) - B Detailed Housing Characteristics - 1970 Census

FIGURE 25: DISTRIBUTION URBAN VS. RURAL - BY REGION AND SUB-REGION
U.S. - RENTER OCCUPIED MOBILE HOME UNITS

	<u>Total</u>	Totals	Inside SMSA	% of Total	Outside SMSA	% of Total
Northeast	32,605		15,029	46.1	17,576	53.9
New England		7,747	1,902	24.6	5,845	75.4
Mid-Atlantic		24,858	13,127	52.8	11,731	47.2
North Central	70,538		28,413	40.3	42,125	59.7
East No. Central		46,165	21,653	46.9	24,512	53.1
West No. Central		24,373	6,760	27.7	17,613	72.3
South	150,809		57,395	38.1	93,414	61.9
South Atlantic		87,240	34,710	39.8	52,530	60.2
East So. Central		31,732	8,384	26.4	23,348	73.6
West So. Central		31,837	14,301	44.9	17,536	55.1
West	67,253		37,826	56.2	29,427	43.8
Mountain		28,491	11,705	41.1	16,786	58.9
Pacific		38,762	26,121	67.4	12,641	32.6

Source: HC (1) - B Detailed Housing Characteristics - 1970 Census
 FIGURE 26: DISTRIBUTION S.M.S.A. VS. OUTSIDE S.M.S.A. - BY REGION AND SUB-DIVISION U.S. - RENTER OCCUPIED MOBILE HOME UNITS

1.2 PLACEMENT OF MOBILE HOMES IN PARKS

This chapter covers the following questions: How many mobile homes are located in mobile home parks? How many are not? Of the mobile homes located in parks, how many are in Woodall-rated parks? How many are not?

After tabulating the data, several correlations were found regarding the ratios of non-park to park locations and non-rated to rated park locations.

1.2.1 Park Versus Non-Park Location

Until now, no information was available on this ratio of mobile homes located in parks to mobile homes located on isolated, private property even though it is desperately needed by the mobile home industry, by other sectors of the housing industry, and by the public sector. To provide an answer to this crucial question, a major effort was undertaken in 1973 by the FMI to determine the park versus non-park distribution of the mobile home unit inventory on a state-by-state basis. Woodall Publishing Co. provided invaluable assistance by hand tabulating crucial state-by-state raw data for the FMI. Finally, based on this raw data, the FMI was able to project the necessary data by early 1975.²

Before presenting this data, we will discuss its significance and potential applications, since it has important ramifications for issues dealt with in many other sections of this report--regulatory questions, consumer financing, future demand, and the consumer movement.

Regulatory issues involve zoning, taxation, and code regulation. In most states, land use controls treat mobile homes in parks differently from those located on private property. Also, mobile homes located on scattered, isolated lots are more likely to be taxed as real property. In many instances, units on private lots may be required to conform to traditional building codes. Thus, state-by-state ratio on park versus non-park location add an important quantitative perspective to the material covered in Volume V, "Public Regulation."

Mobile home location has implications for consumer financing. A unit located on isolated, private property is more likely to qualify for traditional, long-term mortgage financing, especially if it is permanently attached to the land, subject to real property taxation and traditional building codes (as many double-wides are).

Mobile home location is especially and very directly relevant to market research and in particular to demand forecasts, not only by the prospective park developer but also by the the mobile home manufacturer. In many states, most of the unit inventory is located on private property; yet manufacturers may design their units primarily to respond to the conditions in parks and, hence, for the wrong market.

Finally, location is highly relevant to the consumer movement. The widely publicized examples of exploitation of tenants by park owners are very often interpreted to "mirror the fate" of the entire mobile home population. Many consumer advocates often forget that, not only are many of the reported abuses exceptions in the park industry itself, but also that more mobile homes are located on private property than in parks. Thus the majority of the mobile home dwellers by definition are "beyond the reach" of the "malicious" park owner.

National Analysis

Of the 3,893,570 mobile homes in the country, 58.5% or 2,278,757 are on private property, a ratio of 1.4 non-park to park locations. The distribution of mobile homes in non-park compared with park locations varies over the nation. As a general rule, states and regions with depressed economies (such as the Appalachian states) or with only recent economic growth (such as the South) tend to have a greater non-park to park ratio. This is probably due to fewer land use controls and to the low cost of private land. Areas with high land costs tend to favor park developments over private land use largely because of land use control attitudes which reflect real estate economics.

Regional Analysis

The South, despite the adverse ratio of Florida, has the highest non-park to park location ratio. With the state of Florida removed

from the Southern region, the ratio jumps from 2.1 to 3.2. In the South Atlantic sub-region, the ratio changes from 1.6 to 9.8 with the removal of Florida.

The West has the lowest non-park to park location ratio, due primarily to the state of California which accounts for about 3/8 of the region's mobile home inventory and about 2/3 of the Pacific sub-region's inventory. With the exclusion of California, the Western region non-park to park location ratio jumps from .7 to 1.1; the Pacific sub-region jumps from .4 to 1.1, which is the same as the Mountain region's ratio of 1.1.

In the sub-regions, regional differences are more pronounced. The highest non-park to park location ratio is 3.8 for the East South Central, an economically depressed region. The lowest, 1.1, is shared by New England and the Mountain sub-region. New England is an area of proportionately high income, tough zoning laws, and high property values; while the Mountain sub-region has had accelerated park development over the last decade, especially in the form of the retirement parks in the style of California and Florida.

State-by-State Analysis

Figures 27 and 29 show that only a few of the states have more mobile homes in parks than on private property. These are the retirement states- California, Florida, Arizona; the Northeastern states- Connecticut, New Jersey, Rhode Island; Iowa; and Alaska. The retirement states are all

in the U.S.A.'s sun belt which has favored the production of mobile home parks specifically built as retirement communities. The Northeastern states generally have stringent zoning laws and high property costs which discourage mobile home development on private lots. Much of the price of a mobile home in Alaska is the shipping charge and installation labor costs. Park developers are able to take advantage of the economies of scale which are not available to private home developers. The ratio in Iowa is due to the restrictive land use control laws which limit mobile homes to parks in 80% of the municipalities.

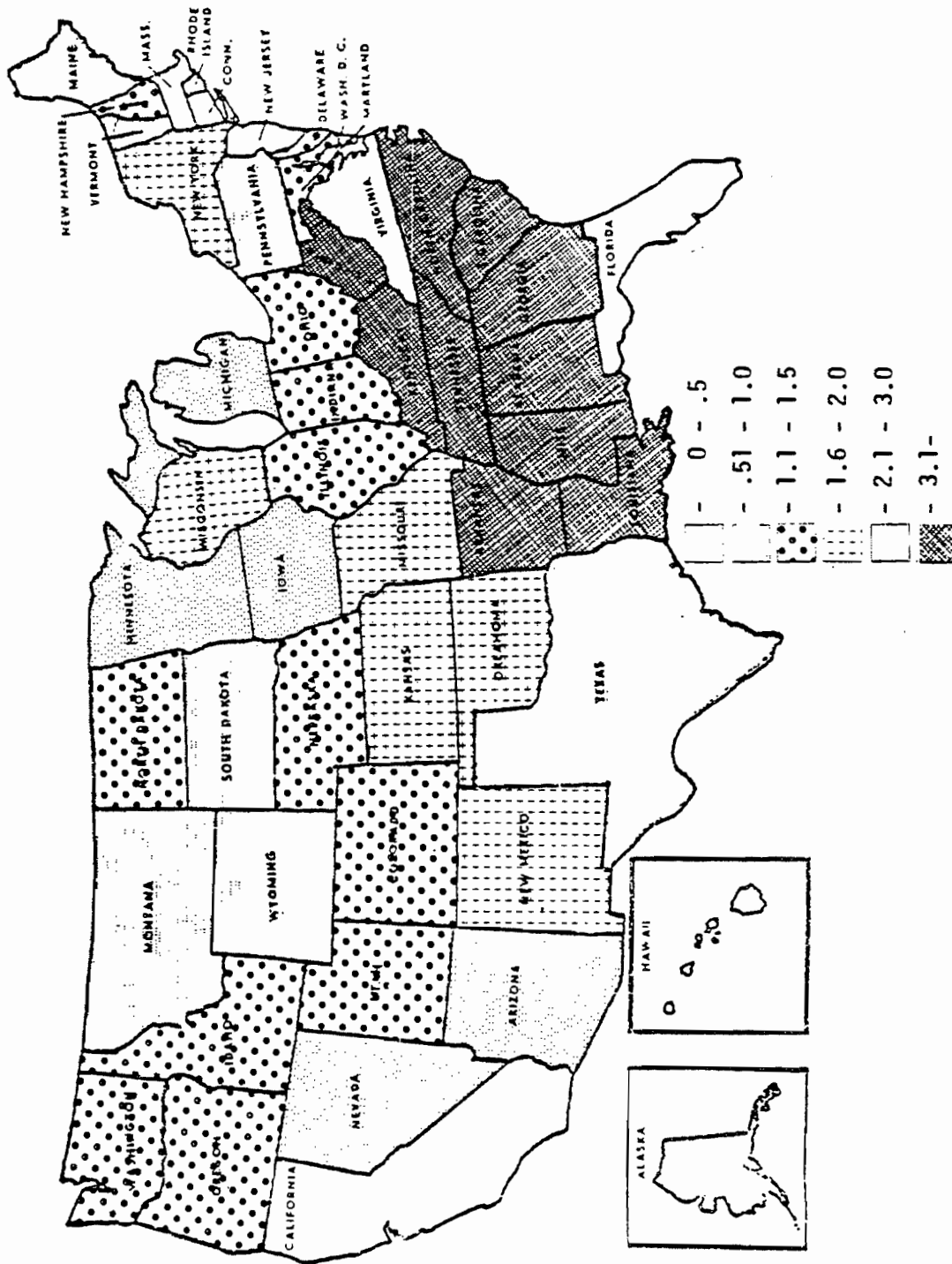
Mississippi, and the Appalachian states of North Carolina, South Carolina, Tennessee, and West Virginia all have non-park to park location ratios of 4 or more. These states have largely rural populations, relatively low property costs (though North Carolina has had a recent land boom which will probably cause a drop in its non-park to park location ratio), and depressed economies.

An Observation

HUD recently entered into a contract with the Bureau of the Census. The contract essentially is for an on-going survey to identify the location of new mobile homes sold in the United States. The survey includes the retail sale of a mobile home by a dealer and the placement of that home on the site for use by its first

occupant, the housing consumer. In announcing this contract, Michael H. Moskow, then an Assistant Secretary of HUD, pointed out that information on the sales and placement of new mobile homes will fill a gap in our knowledge of an important part of new housing production in the United States.³ This contract, however, does not seem to address the park versus non-park location question. It would appear imperative (for reasons not the least of which would be cost effectiveness) that the contract scope be expanded to identify and cover actual park versus non-park location.

As an alternative, HUD might contract the Woodall Publishing Company to expand its activities and to compile reliable data regularly on this issue.



Source: Projected from 1970 Census of Housing HC (7)-6, The Monthly Market Letter on Mobile Home Shipments-Mobile Modular Housing Dealer Magazine, Woodall Compilation of Rated Park Inventory, 1974, and Raw Data on Non-Rated Parks compiled by Woodall for PMHI.

FIGURE 27: RATIO OF NON-PARK TO PARK DISTRIBUTION BY STATE (# OF MOBILE HOME NON-PARK/MOBILE HOME PARK)

REGION	TOTAL MOBILE HOME UNITS	MOBILE HOMES IN PARKS	% MOBILE HOMES IN PARKS	MOBILE HOMES NOT IN PARKS	% MOBILE HOMES NOT IN PARKS	RATIO OF NON-PARKS TO PARKS
NORTHEAST	409,587	156,891	38.3	252,696	61.7	1.6
New England	94,165	44,081	46.8	50,084	53.2	1.1
Middle Atlantic	315,422	112,810	35.8	202,612	64.2	1.8
NORTH CENTRAL	887,923	398,035	44.8	489,888	55.2	1.2
East North Central	572,355	263,865	46.1	308,490	53.9	1.2
West North Central	315,568	134,170	42.5	181,398	57.5	1.4
SOUTH	1,818,209	592,451	32.6	1,225,758	67.4	2.1
South Atlantic	1,026,135	397,871	38.8	628,264	61.2	1.6
East South Central	365,964	76,125	20.8	289,839	79.2	3.8
West South Central	426,110	118,455	27.8	307,655	72.2	2.6
WEST	779,435	467,068	59.9	312,367	40.1	.7
Mountain	327,375	152,351	46.5	175,024	53.5	1.1
Pacific	452,060	314,717	69.6	137,343	30.4	.4

Source: Projected from the 1970 Census of Housing IC (7)-6, The Monthly Market Letter on Mobile Home Shipments/Mobile/Modular Housing Dealer Magazine, Hoodall Compilation of Rated Park Inventory, 1974, and from Raw Data on Non-Rated Parks, compiled by Hoodall for PMHI.

FIGURE 28: PLACEMENT OF MOBILE HOMES WITHIN THE REGIONS AND SUB-REGIONS (JANUARY, 1974)

STATE	TOTAL MOBILE HOME UNITS	MOBILE HOMES IN PARKS	% MOBILE HOMES IN PARKS	MOBILE HOMES NOT IN PARKS	% MOBILE HOMES NOT IN PARKS	RATIO OF NON-PARKS TO PARKS
Alabama	112,723	25,155	22.3	87,568	77.7	3.5
Alaska	13,218	8,591	65.0	4,627	35.0	.5
Arizona	93,079	56,119	60.3	36,960	39.7	.7
Arkansas	60,391	14,384	23.8	46,007	76.2	3.2
California	294,031	240,551	81.8	53,480	18.2	.2
Colorado	61,470	27,558	44.8	33,912	55.2	1.2
Connecticut	10,720	7,422	69.2	3,298	30.8	.4
Delaware	16,429	7,085	43.1	9,344	56.9	1.3
Florida	359,964	247,061	68.6	112,903	31.4	.5
Georgia	172,316	38,581	22.4	133,735	77.6	3.5
Idaho	29,048	12,231	42.1	16,817	57.9	1.4
Illinois	111,564	52,960	47.5	58,605	52.5	1.1
Indiana	107,901	46,243	42.9	61,659	57.1	1.3

Source: Projected from the 1970 Census of Housing HC (7)-6, The Monthly Market Letter on Mobile Home Shipments/Mobile/Modular Housing Dealer Magazine, Woodall Compilation of Rated Park Inventory, 1974, and from Raw Data on Non-Rated Parks, compiled by Woodall for PHH.

FIGURE 29: PLACEMENT OF MOBILE HOMES WITHIN STATES

STATE	TOTAL MOBILE HOME UNITS	MOBILE HOMES IN PARKS	% MOBILE HOMES IN PARKS	MOBILE HOMES NOT IN PARKS	% MOBILE HOMES NOT IN PARKS	RATIO OF NON-PARKS TO PARKS
Iowa	41,141	24,751	60.2	16,390	39.8	.7
Kansas	48,661	18,336	37.7	30,325	62.3	1.7
Kentucky	80,464	18,591	23.1	61,873	76.9	3.3
Louisiana	67,609	15,872	23.5	51,737	76.5	3.3
Maine	30,092	9,047	30.1	21,045	69.9	2.5
Maryland	27,534	13,218	48.0	14,316	52.0	1.1
Massachusetts	14,425	10,459	72.5	3,960	27.5	.4
Michigan	148,425	74,035	49.8	74,505	50.2	1.0
Minnesota	61,516	30,062	48.9	31,454	51.1	1.0
Mississippi	71,603	14,472	20.2	57,131	79.8	4.0
Missouri	93,712	33,895	36.2	59,817	63.8	1.8
Montana	33,171	10,431	31.4	22,740	68.6	2.2
Nebraska	28,169	13,200	46.9	14,969	53.1	1.1

Source: Projected from the 1970 Census of Housing IIC (7)-6, The Monthly Market Letter on Mobile Home Shipments/Mobile/Modular Housing Dealer Magazine, Woodall Compilation of Rated Park Inventory, 1974, and from Raw Data on Non-Rated Parks, compiled by Woodall for PHHI.

FIGURE 29(cont.): PLACEMENT OF MOBILE HOMES WITHIN STATES

STATE	TOTAL MOBILE HOME UNITS	MOBILE HOMES IN PARKS	% MOBILE HOMES IN PARKS	MOBILE HOMES NOT IN PARKS	% MOBILE HOMES NOT IN PARKS	RATIO OF NON-PARKS TO PARKS
Nevada	32,889	18,741	57.0	14,148	43.0	.8
New Hampshire	20,756	9,989	48.1	10,767	51.9	1.1
New Jersey	22,044	19,667	89.2	2,377	10.8	.1
New Mexico	40,060	13,162	32.9	26,898	67.1	2.0
New York	129,085	44,348	34.7	84,737	65.3	1.9
North Carolina	199,988	40,119	20.1	159,869	79.9	4.0
North Dakota	18,118	7,415	40.9	10,703	59.1	1.4
Ohio	141,171	66,171	46.9	75,000	53.1	1.1
Oklahoma	58,584	19,480	33.3	39,104	66.7	2.0
Oregon	72,634	32,122	44.2	40,512	55.8	1.3
Pennsylvania	164,293	48,795	29.7	115,498	70.3	2.4
Rhode Island	3,437	2,699	78.5	738	21.5	.3
South Carolina	112,114	19,284	17.2	92,830	82.8	4.8

Source: Projected from the 1970 Census of Housing HC (7)-6, The Monthly Market Letter on Mobile Home Shipments/Mobile/Modular Housing Dealer Magazine, Woodall Compilation of Rated Park Inventory, 1974, and from Raw Data on Non-Rated Parks, compiled by Woodall for PHHI.

FIGURE 29(cont.): PLACEMENT OF MOBILE HOMES WITHIN STATES

STATE	TOTAL MOBILE HOME UNITS	MOBILE HOMES IN PARKS	% MOBILE HOMES IN PARKS	MOBILE HOMES NOT IN PARKS	% MOBILE HOMES NOT IN PARKS	RATIO OF NON-PARKS TO PARKS
South Dakota	24,031	6,511	27.1	17,520	72.9	2.7
Tennessee	101,174	17,907	17.7	83,267	82.3	4.6
Texas	239,447	68,719	28.7	170,728	71.3	2.5
Utah	21,133	9,730	46.0	11,403	54.0	1.2
Vermont	14,735	4,465	30.3	10,270	69.7	2.3
Virginia	89,279	23,802	26.7	65,477	73.3	2.7
Washington	71,484	33,453	46.8	38,031	53.2	1.1
West Virginia	47,909	8,721	18.2	39,188	81.8	4.5
Wisconsin	63,179	24,456	38.7	38,723	61.3	1.6
Wyoming	16,525	4,379	26.5	12,146	73.5	2.8
Grand Total	3,893,570	1,614,813	41.5	2,278,757	58.5	1.4

Source: Projected from the 1970 Census of Housing IC (7)-6, The Monthly Market Letter on Mobile Home Shipments/Mobile/Modular Housing Dealer Magazine, Woodall Compilation of Rated Park Inventory, 1974, and from Raw Data on Non-Rated Parks, compiled by Hoodall for PHII.

FIGURE 29 (cont.): PLACEMENT OF MOBILE HOMES WITHIN THE STATES

1.2.2 Woodall-Rated Versus Non-Woodall-Rated Parks

The Woodall Publishing Company has given PMHI an estimate that there are approximately 24,500 parks currently in existence, nationally. This projection is based on their insight gained from the annual compilation of the Mobile Home and Park Directory.

Woodall's staff has been rating mobile home parks since 1947. The parks are carefully examined for a number of criteria to determine whether they can be listed anywhere in the one to five-star rating system Woodall has established (for more detail see the chapter on Product Policy B.3.3). The staff considers the conditions of the units, the planning and upkeep of the park, its services and facilities, the competence of its management, and the characteristics of the unit occupants. Parks are reevaluated annually to see if they maintain, exceed, or fall below their previous rating. Rated parks are then listed in the Mobile Home and Park Directory.

In the 1975 issue (based on 1974 inspections) Woodall notes the presence of close to 13,000 parks which meet their rating standards. According to research conducted by Woodall for PMHI, there are an additional 5,000 parks in 1975 that either were once listed but now fall below their standards or have been identified but have never been included among the rated parks. PMHI, furthermore, estimates that there are approximately 6,000 existing parks that have never been listed or inspected for potential listing.

In general, the parks inspected and subsequently listed in the Woodall's Directory are newer, larger, and of a better quality than those not listed. Most of the parks not listed can be stylized as the "Mom and Pop" type of park, which are in many ways synonymous with the parks of the pre- and early post-World War II era of park development and operation.

In an effort to better understand the regional and state-by-state distributions of the national mobile home park inventory, PMHI has performed a series of calculations (described in Footnotes 2 and 4) which offers what appears to be a highly accurate picture of the regional and state representations for the parks.

National Distribution

Out of a total of approximately 3,893,500 mobile homes in the country, about 42% or 1,614,800 of them are located in close to 24,500 parks. Of these park-located mobile homes, 62% (994,240) are in the 13,000 Woodall-rated parks.

Regional Distribution

Figure 30 indicates the regional distribution of all the mobile home parks as projected by PMHI and the number of parks cited in the listings compiled by the Woodall organization. Regionally, the largest concentrations of mobile home parks occur in the Pacific and South At-

REGION	NUMBER OF WOODALL-RATED PARKS	TOTAL NUMBER OF ALL PARKS	PERCENTAGE OF WOODALL-RATED PARKS TO ALL PARKS
NEW ENGLAND	459	763	60.2%
MID-ATLANTIC	1096	1965	55.8%
EAST NORTH CENTRAL	2127	3511	60.6%
SOUTH ATLANTIC	2089	4463	46.8%
EAST SOUTH CENTRAL	533	1552	34.3%
WEST SOUTH CENTRAL	968	2330	41.5%
WEST NORTH CENTRAL	1283	2356	54.5%
MOUNTAIN	1328	2614	50.8%
PACIFIC	3108	4585	67.8%
UNITED STATES (INCLUDING ALASKA and EXCLUDING HAWAII)	13059	24487	53.3%

Source: PMHI Projections Based Largely on 1974 Raw Data

Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 30 REGIONAL DISTRIBUTIONS OF WOODALL-RATED PARKS AND ALL PARKS

Atlantic areas -- 4,585 parks in the former and 4,463 parks in the latter, constituting 18.7% and 18.2% of the national total respectively. The East North Central region has the next largest share with 3,511 parks or 14.3% of the national total. The smallest collection of mobile home parks occurs in the New England states with 763 parks or 3.1% of the total.

The largest number of Woodall-rated parks is present in the Pacific region (3,108 parks), but the next largest aggregation of rated parks may be found in the East North Central region (2,127 parks). The South Atlantic region is third with 2,089 parks. A more interesting statistic, however, is the percentages of Woodall-rated parks to all parks in each region (again see Figure 30). The national average of Woodall-rated parks to all parks is 53.3%. Most of the northern regions -- New England, Mid-Atlantic, East North Central, West North Central, and Pacific -- have averages that are above the national figure, whereas those encompassing the southern half of the United States are all below the national average. Two-thirds of the parks in the Pacific region are rated, whereas only one-third of the parks in the East South Central region are rated.

State-by-State Distribution

In the past, to characterize state-wide park inventories, it was necessary to rely only on the Woodall-rated park listings. With the calculations described in Footnote 4 and the resultant Figure 32 summarizing these calculations, it is now possible to portray the state-by-state presence of all mobile home parks with a fairly accurate estimate (an error factor of certainly less than $\pm 5\%$).

Figure 32 also shows the percentage of Woodall-rated parks to the state totals of mobile home parks. A number of states have percentages higher than 70% (Massachusetts, Connecticut, New Jersey, and California), whereas an almost equal number of states have percentages below 30% (Georgia, South Carolina, South Dakota, Mississippi, and West Virginia). It would thus appear that, outside of Florida (which has a percentage of 62.3%), many of the southern states have high relative numbers of parks that are predominately older, smaller, and of a poorer quality compared to those rated by the Woodall organization.

One may observe from Figure 33 that great variations also exist among states with respect to the percentage of park-located mobile homes in Woodall-rated and non-Woodall-rated parks. California and Florida far outstrip the other states in the number of mobile homes located in Woodall-rated parks. Although Florida has more mobile homes (247,000) located in both rated and non-rated parks than does California (240,500), a smaller percentage of them (65%) are located in Woodall-rated parks than in the case of California which has 80% of its park-located mobile homes in Woodall-rated parks. South Dakota and Wyoming, in comparison, have the smallest percentages of park-located mobile homes in Woodall-rated parks (only 32% and 30% respectively). States with a predominant number of mobile homes in Woodall-rated parks are located in three areas: 1) the "retirement area" (California, Arizona, and Florida); 2) the heavily-populated New England sector (Massachusetts, Connecticut, and Rhode Island); and 3) the Midwest (Minnesota, Michigan, and Iowa).

While several of the northwestern states have high percentages of Woodall-rated parks as well as of units located in rated parks to the respective

state totals, this is not indicative of a generally large and superior segment of the system. Rather, it is indicative of relatively few parks in these states (because of zoning problems, land costs, weather, and other factors). Those available parks are generally well-established and have maintained rating standards--many of these parks have been built in more recent years and had to feature high development standards in order to win zoning approval.

REGION	Total MH in Parks	Total MH in Rated Parks	% MH in Rated Parks	MH in Non-Rated Parks	% MH in Non-Rated Parks	Total MH in Rated Parks	% MH in Rated Parks	MH in Non-Rated Parks	% MH in Non-Rated Parks
Northeast	156,891	106,258	67.7	50,633	32.3	106,258	67.7	50,633	32.3
New England	44,081	30,077	68.2	14,004	31.8	30,077	68.2	14,004	31.8
Middle Atlantic	112,810	76,181	67.5	36,629	32.5	76,181	67.5	36,629	32.5
North Central	398,035	289,036	72.6	103,999	27.4	289,036	72.6	103,999	27.4
East North Central	263,865	198,167	75.1	65,698	24.9	198,167	75.1	65,698	24.9
West North Central	134,170	90,869	67.7	43,301	32.3	90,869	67.7	43,301	32.3
South	592,451	326,815	55.2	265,636	44.8	326,815	55.2	265,636	44.8
South Atlantic	397,871	230,545	57.9	167,326	42.1	230,545	57.9	167,326	42.1
East South Central	76,125	35,441	46.6	40,684	53.4	35,441	46.6	40,684	53.4
West South Central	118,455	60,829	51.4	57,626	48.6	60,829	51.4	57,626	48.6
West	467,068	347,789	74.5	119,279	25.5	347,789	74.5	119,279	25.5
Mountain	152,351	101,669	66.7	50,682	33.3	101,669	66.7	50,682	33.3
Pacific	314,717	246,120	78.2	68,597	21.8	246,120	78.2	68,597	21.8

Source: PMHI Projections Based Largely on 1974 Raw Data Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 31: REGIONAL DISTRIBUTION OF MOBILE HOMES IN WOODALL-RATED AND NON-WOODALL-RATED MOBILE HOME PARKS

STATE	NUMBER OF WOODALL-RATED PARKS	TOTAL NUMBER OF ALL PARKS	PERCENTAGE OF WOODALL-RATED PARKS TO ALL PARKS
ALABAMA	207	504	41.1%
ALASKA	68	148	45.9%
ARIZONA	475	795	59.7%
ARKANSAS	136	374	36.4%
CALIFORNIA	2110	3010	70.1%
COLORADO	153	298	51.3%
CONNECTICUT	76	100	76.0%
DELAWARE	53	104	51.0%
FLORIDA	1222	1962	62.3%
GEORGIA	160	616	26.0%
IDAHO	204	326	62.6%
ILLINOIS	422	683	61.8%
INDIANA	405	666	60.8%
IOWA	297	477	62.3%
KANSAS	147	323	45.5%
KENTUCKY	112	314	35.7%
LOUISIANA	131	367	35.7%
MAINE	116	211	55.0%
MARYLAND	81	178	45.5%
MASSACHUSETTS	111	147	75.5%

Source: PMHI Projections Based Largely on 1974 Raw Data
Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 32: DISTRIBUTION BY STATE OF WOODALL-RATED PARKS AND
ALL PARKS (EXCLUDING HAWAII)

STATE	NUMBER OF WOODALL-RATED PARKS	TOTAL NUMBER OF ALL PARKS	PERCENTAGE OF WOODALL-RATED PARKS TO ALL PARKS
MICHIGAN	492	776	63.4%
MINNESOTA	238	437	54.5%
MISSISSIPPI	90	343	26.2%
MISSOURI	358	615	58.2%
MONTANA	150	290	51.7%
NEBRASKA	140	253	55.3%
NEVADA	152	413	36.8%
NEW HAMPSHIRE	94	176	53.4%
NEW JERSEY	121	164	73.8%
NEW MEXICO	87	246	35.4%
NEW YORK	487	822	59.3%
NORTH CAROLINA	251	799	31.4%
NORTH DAKOTA	71	113	62.8%
OHIO	581	935	62.1%
OKLAHOMA	188	340	55.3%
OREGON	449	685	65.6%
PENNSYLVANIA	488	979	49.9%
RHODE ISLAND	25	42	59.6%
SOUTH CAROLINA	106	407	26.0%
SOUTH DAKOTA	32	138	23.2%

Source: PMHI Projections Based Largely on 1974 Raw Data
Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 32 (Cont.): DISTRIBUTION BY STATE OF WOODALL-RATED PARKS
AND ALL PARKS (EXCLUDING HAWAII)

STATE	NUMBER OF WOODALL-RATED PARKS	TOTAL NUMBER OF ALL PARKS	PERCENTAGE OF WOODALL-RATED PARKS TO ALL PARKS
TENNESSEE	124	391	31.7%
TEXAS	513	1249	41.1%
UTAH	77	152	50.7%
VERMONT	37	87	42.5%
VIRGINIA	157	383	41.0%
WASHINGTON	549	890	61.7%
WEST VIRGINIA	59	214	27.6%
WISCONSIN	227	451	50.3%
WYOMING	30	94	31.9%
UNITED STATES (NOT INCLUDING HAWAII)	13059	24487	53.3%

Source: PMHI Projections Based Largely on 1974 Raw Data
Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 32 (Cont.): DISTRIBUTION BY STATE OF WOODALL-RATED PARKS
AND ALL PARKS (EXCLUDING HAWAII)

STATE	Total MH in Parks	Total MH in Rated Parks	% of MH in Rated Parks	Total MH in Non-Rated Parks	% of MH in Non-Rated Parks
ALABAMA	25,155	13,441	53.4	11,714	46.6
ALASKA	8,591	5,306	61.8	3,285	38.2
ARIZONA	56,119	38,738	69.0	17,381	30.9
ARKANSAS	14,384	5,884	40.9	8,500	59.1
CALIFORNIA	240,551	194,503	80.9	46,048	19.1
COLORADO	27,558	20,953	76.0	6,605	24.0
CONNECTICUT	7,422	6,324	85.2	1,098	14.8
DELAWARE	7,085	4,518	63.8	2,567	36.2
FLORIDA	247,061	161,258	65.3	85,803	34.7
GEORGIA	38,581	16,184	42.0	22,397	58.0
IDAHO	12,231	8,339	68.2	3,892	31.8
ILLINOIS	52,960	38,345	72.4	14,615	27.6
INDIANA	46,243	35,116	75.9	11,127	24.1
IOWA	24,751	17,733	71.6	7,018	28.4
KANSAS	18,336	11,578	63.1	6,758	36.9

Source: PMHI Projections Based Largely on 1974 Raw Data Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 33: STATE-BY-STATE DISTRIBUTION OF MOBILE HOMES IN WOODALL-RATED AND NON-WOODALL-RATED MOBILE HOME PARKS

STATE	Total MH in Parks	Total MH in Rated Parks	% of MH in Rated Parks	Total MH in Non-Rated Parks	% of MH in Non-Rated Parks
KENTUCKY	18,591	9,719	52.3	8,872	47.7
LOUISIANA	15,872	7,044	44.4	8,828	55.6
MAINE	9,047	5,586	61.7	3,461	38.3
MARYLAND	13,218	8,090	61.2	5,128	38.8
MASSACHUSETTS	10,459	7,944	76.0	2,515	24.0
MICHIGAN	74,035	60,434	81.6	13,601	18.4
MINNESOTA	30,062	22,058	73.4	8,004	26.6
MISSISSIPPI	14,472	4,925	34.0	9,547	66.0
MISSOURI	33,895	23,833	70.3	10,062	29.7
MONTANA	10,431	6,119	58.0	4,312	41.3
NEBRASKA	13,200	8,030	60.8	5,170	39.2
NEVADA	18,741	13,584	72.5	5,157	27.5
NEW HAMPSHIRE	9,989	6,439	64.5	3,550	35.5
NEW JERSEY	19,667	15,073	76.6	4,594	23.4
NEW MEXICO	13,162	6,283	47.7	6,879	52.3

Source: PMHI Projections Based Largely on 1974 Raw Data Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 33: STATE-BY-STATE DISTRIBUTION OF MOBILE HOMES IN WOODALL-RATED AND NON-WOODALL-RATED MOBILE HOME PARKS

(cont.)

STATE	Total MH in Parks	Total MH in Rated Parks	% of MH in Rated Parks	Total MH in Non-Rated Parks	% of MH in Non-Rated Parks
NEW YORK	44,348	30,435	68.6	13,913	31.4
NORTH CAROLINA	40,119	16,205	40.4	23,914	59.6
NORTH DAKOTA	7,415	5,574	75.2	1,841	24.8
OHIO	66,171	48,670	73.6	17,501	26.4
OKLAHOMA	19,480	13,102	67.3	6,378	32.7
OREGON	32,122	22,853	71.1	9,269	28.9
PENNSYLVANIA	48,795	30,673	62.9	18,122	37.1
RHODE ISLAND	2,699	1,617	60.0	1,082	40.0
SOUTH CAROLINA	19,284	7,169	37.2	12,115	62.8
SOUTH DAKOTA	6,511	2,063	31.7	4,448	68.3
TENNESSEE	17,907	7,356	41.1	10,551	58.9
TEXAS	68,719	34,799	50.6	33,920	49.4
UTAH	9,730	6,354	65.3	3,376	34.7
VERMONT	4,465	2,167	48.5	2,298	51.5
VIRGINIA	23,802	14,167	59.5	9,635	40.5

Source: PMHI Projections Based Largely on 1974 Raw Data Compiled by Woodall for PMHI (See Footnote 4)

FIGURE 33: STATE-BY-STATE DISTRIBUTION OF MOBILE HOMES IN WOODALL-RATED AND NON-WOODALL-RATED MOBILE HOME PARKS (cont.)

STATE	Total MH in Parks	Total MH in Rated Parks	% of MH in Rated Parks	Total MH in Non-Rated Parks	% of MH in Non-Rated Parks
WASHINGTON	33,453	23,458	70.1	9,995	29.9
WEST VIRGINIA	8,721	2,954	33.9	5,767	66.1
WISCONSIN	24,456	15,602	63.8	8,854	36.2
WYOMING	4,379	1,299	29.7	3,080	70.3
TOTALS	1,614,813	994,242		620,571	

Source: PMII Projections Based Largely on 1974 Raw Data Compiled by Woodall for PMII (See Footnote 4)

FIGURE 33: STATE-BY-STATE DISTRIBUTION OF MOBILE HOMES IN WOODALL-RATED AND NON-WOODALL-RATED MOBILE HOME PARKS

1.3 DEFINITION OF THE MOBILE HOME PARK SYSTEM

The main objective of this section on the industrial organization of the park system is to identify major structural and operational characteristics of the system and to gauge the implications of the characteristics for the system's economic performance. Adequate data for such an analysis are not available for non-rated parks. Only for rated parks do two major data sources exist: Woodall statistics and PMHI's national survey of park operators/owners (PMHI/PS). For statistical purposes, the park system, is therefore defined to comprise all Woodall-rated parks and to exclude non-rated parks. The necessary perspective for this definition was provided by this Chapter 1 on the total unit and park inventory.

This definition appears justified for reasons other than data limitations. Nationally, 62% of all park-sited mobile homes are located in rated parks; for several subregions this percentage is approximately 75%. Furthermore, most non-rated parks are not only older and smaller but also physically and functionally obsolete and hence not representative of today's park system.

2.
Structure

2.1 PROFILE OF THE MOBILE HOME PARK SYSTEM

2.1.1 Origins of the Park System

This project was interested in understanding and characterizing the origins of the park owners for two reasons:

First, to establish if any current park owners have entered the mobile home park system from the traditional housing industry or fields related to it. Because the mobile home industry has been created separately from the traditional housing industry, people entering the mobile home industry from the housing industry may transfer know-how important for the future growth of the park system--and more generally the mobile home industry--or may stimulate the integration of the mobile home industry and the larger housing industry.

Second, to determine how relevant the past experiences of park owners are in providing guidance and/or insight into their current responsibilities and tasks.

Influence from the Traditional Housing Industry

The PMHI Park Survey (See Figure 34) has revealed that approximately one-sixth of all owners had mobile home industry-related backgrounds:

ACTIVITY	FREQUENCY
DEALERSHIP	12%
MANUFACTURING OF MOBILE HOMES	1%
TRAILER-RECREATIONAL VEHICLE PARK DEVELOPMENT AND/OR OPERATION	4%
BUILDING MANUFACTURING	6%
LAND DEVELOPMENT OTHER THAN MOBILE HOME OR TRAILER PARKS	12%
ON-SITE RESIDENTIAL CONSTRUCTION	6%
OTHER ACTIVITIES (NOT SPECIFIED HERE)	16%
WENT STRAIGHT INTO PARK OPERATION WITH NO PRIOR EXPERIENCE	64%

Source: Compiled from responses to the PMHI Park
Operator/Owner Survey

FIGURE 34: PRIOR EXPERIENCES OF PARK OWNERS

dealerships (12%), recreational vehicle park development or operation (4%), and mobile home manufacturing (1%). On the other hand, approximately one-fourth of the respondents were previously engaged in aspects of the traditional building industry--land development other than mobile home or trailer parks (12%), on-site residential construction (6%), and building manufacturing (6%). This suggests that at least as many, if not more, of the park owners come from traditional building industry-related activities than from mobile home industry-related fields.

Those respondents engaged in the development of their parks (See Figure 35) revealed much the same background as the owners. Only a small percentage had had mobile home industry-related experiences: dealerships (15%), and recreational vehicle park development or operation (8%).

None had prior experience as a manufacturer of mobile homes. Those having backgrounds in the traditional building industry comprised approximately one-fifth of the developer-respondents--again an amount similar to the owner-respondents.

By creating a separate and rapidly growing, new industry--namely, the park system--the mobile home industry has succeeded in attracting to the park system some highly relevant expertise from fields related to the on-site building industry. The representation of building industry-related backgrounds in the park system may be larger than indicated by the PMHI Park Survey. It is apparent that this trend of people entering the park system from the traditional building industry is continuing and will likely continue in the future. This professional movement is significant because it offers the possible integration of the mobile home industry and the conventional housing industry.

ACTIVITY	FREQUENCY
DEALERSHIP	15%
MOBILE HOME MANUFACTURER	0%
TRAILER-RECREATIONAL VEHICLE PARK DEVELOPMENT AND/OR OPERATION	8%
BUILDING MANUFACTURER	2%
DEVELOPMENT OF OTHER FACILITIES THAN MOBILE HOME OR TRAILER-RECREATIONAL VEHICLE PARKS	3%
ON-SITE RESIDENTIAL CONSTRUCTION	11%
OTHER CATEGORIES	11%
ENTERED MOBILE HOME DEVELOPMENT WITHOUT PRIOR EXPERIENCE	53%

Source: Compiled from responses to the PMHI Park
Operator/Owner Survey

FIGURE 35: PRIOR EXPERIENCES OF PARK DEVELOPERS

Relevance of Origins

The PMHI Park Survey indicates that the range of prior experiences held by the current owners is large, but also that many of these experiences were not directly related to the mobile home industry or the park system. Sixty-four percent of the owner-respondents had not had prior background in mobile home industry-related activities. The types of experiences cited by those who had had prior involvement with this industry included mobile home dealerships, recreational vehicle development, and mobile home manufacturing. The frequencies of these types of experiences being cited were low, ranging from 1% to 12% (see Figure 34). A number of these owner-respondents had participated in two or more such experiences related to the mobile home industry. It is noteworthy that only 1% of the respondents were previously involved in the manufacturing of mobile home units.

As an alternative to practical experience, 1% of the respondents had had prior school training in park management. The form of the schooling or school(s) attended was not clear from the survey. The PMHI staff is currently aware of only one university in the United States that offers study in park management--Michigan State University, Lansing, Michigan. A private organization in Los Angeles--Park Management Associates-- also provides instruction in park management, both through attendance and by mail-order.

In spite of the somewhat limited characteristics of the survey and

the resultant data, a number of important observations concerning potential difficulties that might be encountered in both the start-up and the operation of a park can be drawn from the data and the collective experience of the staff. Fifty-one percent of the owner-respondents had developed the park about which they were answering the PMHI Park Survey questionnaire. The other 49% had purchased the specific park after it had been developed by someone else. This discussion will note potential problem areas for both the owner-developer and the owner-purchaser.

First, it is clear from the PMHI Park Survey data that many park owner-respondents had had, at best, limited prior experiences that would enhance their knowledge of park development and operation. This presumably means that many of their practices would have to be established by trial-and-error or by "seat-of-the-pants" common sense. It is likely that these park owners would experience, as in many business ventures, problems in the procedures for start-up and initial operation which, if solved inadequately, could cause their failures. That many such inexperienced people are able to begin park operation is an indication of the relative "youth" of the mobile home industry and of its apparent lack of complex or established practices that would offer obstacles to development and operation.

Second, many of the park owners run small organizations and must risk the problems that may befall such independence. The traditional image of the "Mom and Pop" trailer camps, popular in the 1930's

and 1940's, is not true of the generally more professional contemporary park system. But it is still true that many parks are operated and owned by husband-and-wife teams, who depend upon the parks for their livelihoods and who have neither large capital reserves nor prior managerial experience. Whereas many of the best parks in the national park system in terms of quality of product and service as well as profitability are of the one-park variety, they do not represent the average. Because of a number of factors (e.g. the expenses of development and operation, expansion of the park system at the regional and national levels and the resultant increase in competition for the consumer market, and a stricter regulatory environment), it is clear that the one-park owner today faces a complex situation.

Conclusions

The mobile home industry, intentionally or otherwise, has attracted and continues to attract a significant participation of people from the traditional building industry. These people have participated in the creation and development of the park system, forging a new, rapidly growing national industry. This has brought relevant know-how into the park system. It may also signal a slowly emerging trend toward integration of the mobile home and the larger housing industry. Finally, the existence of know-how of the traditional building industry in the park system suggests the potential capability of this system to move into markets not presently served

by the mobile home industry (e.g. higher density urban housing).

The apparent lack of relevant experience of the park owner- developers and the owner-purchasers has been discussed at some length already. That many park owners are able to enter and succeed in the park system without such experience is indeed remarkable and is indicative of the obvious "youth" of the mobile home industry. But to continue the recent growth of both the park system and the encompassing mobile home industry in the face of increasing competition within and outside of the industry and the likely increase in complexities of start-up and operation procedures, there must be a corresponding injection of more sophisticated know-how. Thus, individuals who enter the park system will probably increasingly require relevant prior experience or education.

One possibility for the prospective owner who wishes to reduce the risks involved in the development and/or operation of a park would be to employ a professional developer or manager, either of whom would be a specialist and thus more knowledgeable in these tasks. The owner who does so may incur greater expenses in both processes, but the likelihood of his success, financially and in providing services, would be greater. At the moment the existing supply of such professional developers or managers is not being used to its full potential. This implies that the park system and the mobile home industry as a whole could benefit from both 1) the

education of park owners as to the advantages of professionally trained talent and 2) the training of these professionals.

A start has been made. Educational programs similar to the one at Michigan State University or with Park Management Associates should be extremely valuable. As an alternative to direct classroom learning, the MHMA's Land Development Committee could develop and publish continuously updated instructional documents on mobile home development. There is also an increasing number of private firms which provide consulting services on the feasibility of development and the methods to be followed, once decisions are made to proceed. Unfortunately, most of these consulting firms have met with little success due to underutilization.

There is currently available little information that offers meaningful insights into park operations. Questions about monitoring cash flow, establishing rents, or choosing services are not discussed in any substantive fashion in any currently available literature. Nor are there any commercial services which have been formed specifically to treat such questions. The formation of a private or public agency to provide advisory services would appear to be of primary importance to the continued growth and well-being of the park system. An organization like the Woodall Publishing Company, which has extensive experience in park operation gained from observing the national park system for almost thirty years, should be encouraged to become involved in this work area.

2.1.2 Production of New Mobile Home Parks

The following discussion on production of new parks and spaces is based on tabular data compiled specifically for PMHI by the Woodall Publishing Company as well as on annually compiled Woodall tabulations listing new parks and new spaces for each state. This discussion will concentrate on the production period from 1969 to 1973.

Before proceeding to an analysis of production, it is necessary to explain PMHI's method of interpreting and refining the raw data provided by Woodall. With regard to new space production, the number of new spaces per year for a given year is defined as the total number of Woodall-listed spaces in that given year minus that of the previous year plus the number of spaces deleted from the listing in the given year. The assumption is that the new spaces either replace deleted ones or increase the number of total spaces. For example, the total number of spaces in New York was 31,414 in 1972 and 27,442 in 1971; the number of deleted spaces in 1972 was 923. Therefore, the number of new spaces in 1972 was $31,414 - 27,442 + 923 = 4895$.

Regional figures were determined by summing the data for individual states within each region. National figures are for the continental United States only.

National Production of New Parks and Spaces

An analysis of national production figures (as shown in the summations in Figure 36) does not reveal any clear trends in the production of new parks and spaces between 1969 and 1973. Due to significant year to year fluctuations, it can only be said that production figures presented a see-saw pattern of growth. Production of new parks was comparatively low in 1969 and 1971, and although the number of new parks produced in each of these two years is nearly identical, the number of new spaces produced in each year differs significantly. Similarly, while production of parks decreased in 1973 by 27% from the previous year, the number of new spaces decreased by only 5%. These discrepancies are reflected in the changes in average park size -- the average number of new spaces per new park. Although the average park size reached its peak in 1973, it too underwent significant fluctuation from year to year.

Regional Production of New Parks and Spaces

An examination of production by region also reveals a see-saw pattern of growth in many instances (See Figure 37). Nevertheless, it is possible to identify certain regions which have higher growth rates than other regions. While annual production figures for new parks remained relatively constant or even declined in the New England, Mid-Atlantic, East South Central, and Pacific regions, production figures in other regions increased by as much as 50 to over 100 percent. It should be noted that the peak years of park

YEAR	NEW PARKS	NEW SPACES	AVG. SPACES/PARK
1969	852	105,721	124.1
1970	1586	164,089	103.5
1971	856	71,761	83.8
1972	1420	170,811	120.3
1973	1026	162,379	158.3

Source: Computed by PMHI from Raw Data Provided by the Woodall Publishing Company. (Computations Revised June 1976)

Figure 36: ANNUAL NATIONAL TOTALS OF NEW PARKS AND SPACES FOR THE PRODUCTION PERIOD 1969-1973.

REGION		1969	1970	1971	1972	1973
NEW ENGLAND	P	42	52	17	14	49
	S	4092	3068	2228	2983	4551
	S/P	97.4	59.0	131.0	213.0	92.9
MID ATLANTIC	P	75	100	65	82	54
	S	7386	6688	6913	9103	8955
	S/P	98.5	66.9	106.4	111.0	165.8
SOUTH ATLANTIC	P	78	277	200	146	123
	S	22346	39453	10288	40999	42475
	S/P	286.5	142.4	51.4	274.7	345.3
E.N. CENTRAL	P	112	317	89	150	199
	S	15659	30417	12442	18728	33832
	S/P	139.8	96.0	139.8	124.9	170.0
E.S. CENTRAL	P	102	40	41	89	66
	S	3238	3998	4860	6855	6800
	S/P	31.8	100.0	119.5	77.0	103.0
W.N. CENTRAL	P	62	285	68	101	93
	S	12102	29872	1843	12965	13121
	S/P	193.5	104.8	27.1	128.4	141.1
W.S. CENTRAL	P	78	141	37	423	134
	S	10678	7471	3557	36396	12397
	S/P	136.9	53.0	96.1	86.0	92.5
MOUNTAIN	P	55	122	95	120	118
	S	3423	12515	12381	18571	14845
	S/P	62.2	102.6	130.3	154.8	125.9
PACIFIC	P	248	252	244	29.5	190
	S	26897	30607	17249	25111	25403
	S/P	108.5	121.5	70.7	85.1	133.7

Source: Computed by PMHI from Raw Data Provided by the Woodall Publishing Company. (Computations Revised June 1976)

Figure 37: REGIONAL PRODUCTION OF NEW PARKS AND SPACES FOR THE PERIOD 1969-1973.

production by region do not coincide for all the regions. For example, the peak annual production of parks in the East South Central region occurred in 1969, whereas the peak production for the Mountain region was reached in 1973.

The regional breakdown also indicates that the average number of spaces per park increased in most regions. The largest average number of spaces per park was recorded in the South Atlantic region (345.3 spaces/park in 1973), and the smallest average occurred in the West North Central region (27.1 spaces/park in 1971). The average number of spaces per park in the Pacific region (which includes California) never exceeded 133.7 -- less than half that of the South Atlantic region (which includes Florida).

Production of New Spaces by State

Two states -- Florida and California -- were consistent leaders in production of new spaces from 1969 to 1973. During this five year span, the average production per year in Florida was 20,990 spaces; in California it was 20,857 spaces. There is a significant gap between the production of new spaces in these two states and the production in the eight other leading states (See Fig. 38). It is apparent that the areas with the greatest growth in production of spaces are the California-Arizona area and the Michigan-Ohio-Indiana area.

STATE	1969	1970	1971	1972	1973	average
FLA	11,290	29,261	1,095	29,682	33,626	20,990
CAL	21,593	23,747	15,138	21,254	22,555	20,857
TEX	7,667	1,246	00	29,768	6,920	9,120
MICH	6,749	12,103	1,070	4,241	8,284	6,489
OHIO	2,957	8,412	2,821	5,506	6,889	5,317
IND	2,419	3,873	4,297	2,217	12,239	5,009
ARIZ	00	5,561	4,461	5,511	4,232	3,953
MO	3,412	9,234	00	2,463	4,119	3,845
PA	3,495	4,049	3,810	3,570	4,282	3,841
MINN	3,783	7,995	48	3,337	1,169	3,266

Source: Computed by PMHI from Raw Data Provided by the Woodall Publishing Company. (Computations Revised June 1976)

Figure 38: TABULATION OF THE TEN STATES WITH THE LARGEST AVERAGE ANNUAL PRODUCTION OF NEW SPACES FOR THE PERIOD 1969-1973.

A Comparison of New Spaces Produced Versus New Units Shipped

In Figure 39, the numbers of new mobile home units shipped have been tabulated by region and year and compared with the total number of park spaces produced for each year. The purpose of this comparison was to indicate the degree of fit between the units shipped for the several regions and the number of park spaces available for locating them. The general disparity between the units shipped and the spaces available is particularly evident in four regions: New England, Mid-Atlantic, South Atlantic, and East South Central. In the East South Central region, for instance, an annual average of 5,150 park spaces was produced between 1969 and 1973, whereas the number of units shipped to this region averaged 51,454. Thus only 10% of these new units could have occupied the new park spaces. The rates of fit between the number of spaces built and the number of units shipped for the other three regions, Mid-Atlantic, New England, and South Atlantic, were, respectively, 19.8%, 30.4%, and 21.5%. These rates indicate that most recently-built mobile homes located in these four regions are not placed in parks but are sited on private property.

The best fit between the number of spaces produced and the number of units shipped is found in the Pacific region. Specifically, an average of 25,053 spaces/year were built during the period of 1969 to 1973 and an average of 48,285 units were shipped to this region. This comparison provides a rate of fit of 51.8% between spaces and units, thus indicating that roughly half of new mobile home units in this region are likely to be located in parks.

REGION	1969	1970	1971	1972	1973
New England					
total spaces	4092	3068	2228	2983	4551
units shipped to	11814	11148	10915	10954	10669
Mid-Atlantic					
total spaces	7386	6688	6913	9103	8955
units shipped to	36080	32783	36368	46152	45889
South Atlantic					
total spaces	22346	39453	10288	40099	42475
units shipped to	111003	114443	138590	175720	176624
East North Central					
total spaces	15659	30417	12442	18728	33832
units shipped to	65669	65012	69926	74021	80436
East South Central					
total spaces	3238	3998	4860	6855	6800
units shipped to	33701	33163	51403	68430	70574
West North Central					
total spaces	12002	29872	1843	12965	13121
units shipped to	34157	33135	40492	50881	48398
West South Central					
total spaces	10678	7471	3557	36396	12397
units shipped to	44103	50228	61678	87205	76563
Mountain					
total spaces	3423	12515	12381	18571	14845
units shipped to	29041	32632	43564	53181	52721
Pacific					
total spaces	26897	30607	17249	25111	25403
units shipped to	44148	37186	49989	54201	55900
UNITED STATES-total					
total spaces	105721	164089	71761	170811	162379
units shipped in	418604	417439	507650	626467	624779

Source: Computed by PMHI from Raw Data Provided by the Woodall Publishing Company; Unit Shipment Data from Monthly Market Letter, Mobile-Modular Housing Dealer Magazine

Figure 39: COMPARISON BY REGION AND YEAR OF THE PRODUCTION OF NEW SPACE VERSUS NUMBER OF MOBILE HOME UNITS SHIPPED FOR THE PERIOD OF 1968 TO 1973.

From the data listed in Figure 39 it is apparent that, nationally there has been little reduction in the disparity between the number of mobile home units shipped and the number of park spaces developed. In 1969, the amount of spaces constructed was 25.2% of the number of units shipped. By 1970, this percentage had risen to 39.3%, but by 1973 it had declined to 25.9%. The fact that this rate of fit exceeded 30% only once during the study period indicates a structural difference between these two production rates. Whether such low rates of fit are evidence of the real quantity of demand for park spaces is not clear. It is also not clear whether efforts should be made to encourage one group (the park developers or the unit manufacturers) to establish fit with the other. To do so may create artificial situations where too many park spaces would become available or insufficient units would be manufactured for sale to others, such as purchasers who wish to locate their units in non-rated parks or on private property. An analysis of the character of the supply of and demand for park spaces would go beyond the scope of this supply-side-oriented study.

2.1.3 Inventory of Woodall-Rated Parks

National Distribution

The number of mobile home parks rated by the Woodall Publishing Company is approximately one-half of the projected total number of mobile home parks or about 13,000 Woodall-rated parks to the projected national total of 24,500. Examination of the national distribution data in Figure 40 indicates that the number of mobile home parks has generally been on the increase since 1968. In this regard, it is interesting to note that although the total number of Woodall-rated parks tended to follow only an erratically upward path (see Figure 41), the graph of the total number of spaces (see Figure 42) across the country has a much more regular upward trend. The apparent uneven growth in the number of Woodall-rated parks--despite the fact that an average 1,150 new parks have been developed annually for the period of 1968 to 1973--is an indication of the yearly adjustments in the Woodall rating system. Thus, though almost 7,000 new parks have been developed in the period from 1968 to 1973 (reported by the Woodall Organization as 1969 to 1974), there has been a change of only 905 parks in the Woodall listings. Such a minimizing of the change in the number of the Woodall-rated parks suggests that, as new parks are included in the listing, older parks fail to meet the new, upgraded standards.

NORTHEAST

	1974	1973	1972	1971	1970	1969	1968	1958
<u>NEW ENGLAND</u>	459 *	472	489	498	453	446	418	423
	31,103 **	30,470	29,584	28,198	25,388	23,698	21,668	15,390
	68.76 ***	64.56	60.50	56.62	56.04	53.14	51.84	36.38
<u>CONNECTICUT</u>	76	83	89	87	85	85	86	100
	6,414	6,536	6,965	6,799	6,457	6,163	5,991	5,010
	84.39	78.75						
<u>MAINE</u>	116	97	92	82	79	99	84	92
	5,864	4,903	4,282	3,627	3,818	3,693	3,086	2,528
	50.55	50.55						
<u>MASSACHUSETTS</u>	111	108	110	108	107	110	115	115
	8,360	7,878	7,329	6,600	6,206	6,196	6,263	4,566
	75.31	72.94						
<u>NEW HAMPSHIRE</u>	94	104	116	131	102	83	69	57
	6,449	6,239	6,211	6,514	5,017	4,150	3,286	1,483
	68.60	59.99						
<u>RHODE ISLAND</u>	25	35	36	35	32	31	31	26
	1,842	2,423	2,286	1,847	1,678	1,642	1,553	991
	73.68	69.23						

* Total rated parks. ** Total spaces *** Average spaces/park

FIGURE 40: WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

Source: Compiled by PMHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

NORTHEAST con't

	1974	1973	1972	1971	1970	1969	1968	1958
VERMONT	37* 2,174** 58.75***	45 2,491 55.36	46 2,511	55 2,811	48 2,212	38 1,854	33 1,489	33 812
MID-ATLANTIC	1,096 80,812 73.73	1,179 77,337 65.60	1,148 70,137 61.10	1,130 67,273 59.53	1,048 58,239 55.57	1,020 55,231 54.15	994 54,128 54.46	1,339 40,679 30.38
NEW JERSEY	121 15,263 126.14	123 12,800 104.07	123 12,186	123 11,452	123 11,121	138 11,734	154 12,474	179 8,562
NEW YORK	487 32,238 66.19	475 31,414 66.14	455 27,442	445 26,024	422 24,259	445 24,037	458 24,230	623 16,339
PENNSYLVANIA	488 33,311 68.26	581 33,123 57.01	570 30,509 53.23	562 29,797 53.02	503 22,859 45.45	437 19,460 44.53	382 17,424 45.61	537 15,778
TOTAL PARKS	1,555	1,651	1,637	1,628	1,501	1,466	1,412	1,762
SPACES	112,374	107,807	99,721	95,471	83,627	78,929	75,796	56,069
AVERAGE NO. SPACES PER PARK	72.26	65.30	60.92	58.64	55.71	53.84	53.68	31.82

* Total rated parks **Total spaces ***Average spaces/park

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

Source: Compiled by PHII from 1968-74 Statistics of Woodall's and the
1958 Trailer Topic Tabulations

NORTHCENTRAL

	1974	1973	1972	1971	1970	1969	1968	1958
<u>EAST NORTHCENTRAL</u>	2,127* 220,370** 103.60***	2,059 195,775 95.08	2,001 181,672 90.79	1,987 173,587 87.36	1,892 152,491 80.60	1,847 141,600 76.67	1,837 130,937 71.28	2,091 99,743 47.70
ILLINOIS	422 41,358 98.00	426 40,699 95.54	410 37,277	404 35,366	396 33,596	386 33,740	401 30,120	417 19,490
INDIANA	405 40,812 100.77	357 29,258 81.96	355 28,035	352 24,414	337 22,770	337 21,220	300 19,475	426 16,145
MICHIGAN	492 66,465 135.09	475 60,645 127.67	446 56,812	464 57,038	420 45,634	402 39,496	392 34,581	471 28,714
OHIO	581 54,059 93.04	533 47,847 89.77	504 43,207	483 41,479	502 38,514	498 36,318	513 36,200	599 29,175
WISCONSIN	227 17,676 77.86	268 17,326 64.65	286 16,341	279 15,290	237 11,977	224 10,826	231 10,560	178 6,218

* Total rated parks ** Total spaces ***Average spaces/park

Source: Compiled by PMH from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40: WOODALL-RATED MOBILE HOME PARKS 1958:1968-74
(cont.) U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

		NORTH-CENTRAL CON'T									
		1974	1973	1972	1971	1970	1969	1968	1968	1958	
WEST NORTH-CENTRAL		1,283 *	1,265	1,162	1,146	877	1,113	1,304	1,164		
		103,773 **	94,929	83,020	84,542	56,548	58,149	60,120	33,422		
		81.39 ***	75.04	71.45	73.77	64.48	52.25	46.10	28.71		
IOWA		297	284	246	225	173	253	245	234		
		21,218	19,271	15,047	14,924	10,020	11,746	10,976	6,399		
KANSAS		147	162	146	126	101	142	256	264		
		12,959	11,971	10,887	11,402	7,617	7,784	10,332	7,122		
MINNESOTA		238	246	239	246	251	237	244	130		
		25,056	24,687	21,733	22,323	15,955	12,798	12,609	4,736		
MISSOURI		358	343	317	336	180	216	291	219		
		26,823	23,692	21,342	22,524	13,404	13,078	13,939	6,704		
NEBRASKA		140	136	124	122	94	138	143	142		
		8,943	7,853	7,481	6,38	4,055	5,417	5,494	4,067		
NORTH DAKOTA		71	68	63	64	54	52	49	54		
		6,473	5,808	4,881	5,095	3,885	3,716	3,211	1,821		
		91.16	85.41								

* Total rated spaces ** Total spaces *** Average spaces/park

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958:1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

Source: Compiled by PHII from 1968-74 Statistics of Woodall's and the
1958 Trailer Topic Tabulations

NORTHCENTRAL con't

	1974	1973	1972	1971	1970	1969	1968	1958
SOUTH DAKOTA	32 *	.26	27	27	24	75	76	121
	2,301 **	1,647	1,649	1,636	1,612	3,610	3,559	2,573
	71.90 ***	63.35						
TOTAL PARKS	3,410	3,324	3,163	3,133	2,769	2,960	3,141	3,255
SPACES	324,143	290,704	264,692	258,129	209,039	199,749	191,057	133,165
AVERAGE SPACES PER PARK	95.28	87.46	83.68	82.39	75.49	67.48	60.83	40.91

*Total rated parks ** Total spaces *** Average spaces/park

Source: Compiled by PMHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

SOUTH

	1974	1973	1972	1971	1970	1969	1968	1958
<u>SOUTH ATLANTIC</u>	2,089 * 286,945 ** + 125.35 ***	2,115 262,475 124.10	2,114 238,409 112.78	2,014 232,422 115.40	1,903 205,365 107.92	2,042 224,205 109.80	2,113 190,992 90.39	2,479 108,732 43.86
DELAWARE	53 6,552 123.62	46 4,999 108.67	60 6,624	40 4,353	40 4,259	45 4,503	45 3,989	68 2,432
WASHINGTON, D.C.	0 0	1 62 62	1 62	1 62	1 62	1 63	1 63	2 119
FLORIDA	1,222 206,811 169.23	1,251 187,705 150.04	1,235 167,122	1,254 167,032	1,158 143,456	1,271 165,023	1,280 133,802	1,185 69,389
GEORGIA	160 19,844 124.02	167 18,961 113.54	165 16,939	154 14,900	156 13,171	162 12,013	165 12,015	250 7,449
MARYLAND	81 8,400 103.70	86 8,628 100.33	91 8,199	72 9,111	74 12,054	79 7,039	89 7,405	139 5,999
NORTH CAROLINA	251 17,621 70.20	235 15,434 65.68	225 14,487	215 15,374	211 12,813	216 12,677	236 12,624	288 6,687

* Total rated parks ** Total spaces *** Total spaces/park incl. Florida; excluding Florida, is 75.10

Source: Compiled by PMHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40: WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74 (cont.) U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

SOUTH con't.

	1974	1973	1972	1971	1970	1969	1968	1958
SOUTH CAROLINA	106 * 8,863 ** 83.61 ***	103 8,542 82.93	100 7,335	95 6,763	92 6,281	97 9,879	104 5,880	234 5,944
VIRGINIA	157 15,372 97.91	162 15,275 94.29	166 14,997	156 13,383	147 12,187	151 12,250	161 14,094	255 9,779
WEST VIRGINIA	59 3,482 59.01	64 2,869 44.83	71 2,706	27 1,444	24 1,082	20 758	32 1,120	58 934
EAST-SOUTH CENTRAL	533 43,331 81.29	497 37,376 75.20	419 31,541 75.23	400 28,111 70.28	397 21,026 52.96	418 24,410 58.40	412 23,227 56.38	555 14,127 25.45
ALABAMA	207 16,866 81.47	170 13,220 72.77	134 11,370	135 9,851	144 9,564	163 10,203	124 8,578	134 4,420

* Total rated parks ** Total spaces *** Average spaces/park

Source: Compiled by PIHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40: WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
(cont.) U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

SOUTH con't

	1974	1973	1972	1971	1970	1969	1968	1958
KENTUCKY	112 * 10,772 ** 96.17 ***	114 9,867 86.55	92 7,895	78 6,737	68 5,386	66 5,070	76 5,462	122 4,336
MISSISSIPPI	90 6,268 69.64	93 5,677 61.04	98 5,404	94 4,942	96 4,686	126 5,208	125 4,345	105 2,616
TENNESSEE	124 9,425	120 8,612	95 6,072	93 6,581	89 6,076	63 3,929	87 4,842	194 2,755
WEST-SOUTH CENTRAL	968 82,896 85.63	969 76,015 78.45	609 45,523 74.75	834 50,775 60.88	755 46,237 61.24	762 38,116 50.02	1,023 45,354 44.33	1,527 42,734 27.98
ARKANSAS	136 7,083 52.08	149 6,749 45.30	95 6,968	133 6,175	135 5,216	136 4,545	197 5,125	98 2,083
LOUISIANA	131	134	135	165	134	129	181	167

* Total rated parks ** Total spaces ***Average spaces/park

Source: Compiled by PMII from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

SOUTH con't

	1974	1973	1972	1971	1970	1969	1968	1958
LOUISIANA	9,455 * 72.17 **	7,966 59.45 **	7,257	8,352	6,213	6,168	7,279	4,504
OKLAHOMA	188 18,395 97.84 ***	186 16,731 89.95 ***	162 12,523	139 10,312	107 8,059	123 6,728	116 6,246	158 2,543
TEXAS	513 47,963	500 44,569	217 18,775	397 25,926	379 26,749	374 20,675	529 26,704	1,104 32,604
TOTAL PARKS	3,590	3,581	3,142	3,248	3,055	3,222	3,548	4,561
TOTAL SPACES INC. FLORIDA	413,172	375,866	315,473	311,308	272,628	286,731	259,573	165,593
TOTAL PARKS EXCL. FLORIDA	2,368	2,330	1,907	1,994	1,897	1,951	2,268	3,376
TOTAL SPACES EXCL. FLORIDA	206,361	188,161	148,351	144,276	129,172	121,708	125,771	96,204
AVERAGE SPACES PER PARK INCL. FLORIDA	115.09	104.96	100.41	95.85	89.24	88.99	73.16	36.30
AVERAGE SPACES PER PARK EXCL. FLORIDA	07.14	80.76	77.79	72.36	68.09	62.38	55.46	28.49

* Total parks ** Average spaces/park *** Average spaces/park

Source: Compiled by PMHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

WEST

	1974	1973	1972	1971	1970	1969	1968	1958
MOUNTAIN	1,328 * 119,193 ** 89.75 ***	1,316 103,656 78.17	1,280 97,386 76.08	1,237 89,714 71.72	1,259 84,042 66.75	1,464 90,338 61.74	1,468 94,762 64.55	1,775 51,030 28.74
ARIZONA	475 47,602 100.21	468 38,976 83.28	476 43,172	462 41,094	451 38,122	475 40,304	505 46,725	506 16,682
COLORADO	153 23,504 153.62	146 19,280 132.06	128 14,714	125 12,796	142 12,583	243 15,107	253 14,779	332 10,413
IDAHO	204 9,314 45.65	204 8,138 39.89	201 8,372	197 7,171	190 6,769	188 6,483	185 6,166	173 3,590
MONTANA	150 3,254 47.40	149 6,095 40.91	154 5,215	157 5,047	155 4,713	162 4,859	97 3,185	159 3,254
NEVADA	152 14,874 97.85	151 15,483 102.54	137 12,404	124 10,256	126 9,726	137 10,280	165 10,425	159 5,801

* Total rated parks ** Total spaces *** Average spaces/park

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

Source: Compiled by PMHI from 1968-74 Statistics of Woodall's and the
1958 Trailer Topic Tabulations

WEST cont'd

	1974	1973	1972	1971	1970	1969	1968	1958
NEW MEXICO	87 *	105	85	82	119	120	125	208
	8,350 **	7,806	6,674	6,657	7,506	6,319	6,626	4,927
	96.06 ***	74.34						
UTAH	77	68	63	56	45	85	83	84
	6,865	6,267	5,257	4,043	3,251	4,971	4,659	2,184
	89.15	92.16						
WYOMING	30	35	36	34	31	54	55	154
	1,565	1,611	1,578	1,650	1,372	2,065	2,197	4,179
	52.16	46.03						
PACIFIC	3,176	3,169	3,159	3,242	3,095	3,042	3,125	2,842
	284,096	273,118	252,769	249,082	221,430	205,014	198,764	105,732
	+ 89.45	86.18	80.02	76.52	71.54	67.39	63.60	37.20
ALASKA	68	66	68	82	86	102	79	not in
	5,631	5,364	4,930	4,183	3,697	3,996	3,605	union
	82.80	81.27						

* Total rated parks **Total spaces ***Average spaces/park †Incl. Calif. Excluding Calif., is 53.55

Source: Compiled by PHHI from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958: 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

WEST con't

	1974	1973	1972	1971	1970	1969	1968	1958
CALIFORNIA	2,110* 227,011** 107,50***	2,103 215,971 102,70	2,065 196,963 95.38	2,146 192,737 89.81	2,075 173,200 83.47	2,058 160,107 77.80	2,200 159,037 72.29	2,204 87,701
HAWAII	none noted	- - -	- - -	- - -	- - -	- - -	- - -	- - -
OREGON	449 23,877 53.17	466 23,825 51.13	467 22,577	438 20,862	416 19,000	395 17,577	388 16,438	317 8,122
WASHINGTON	549 27,577 50.23	534 27,958 52.37	559 28,299	576 29,600	518 25,533	487 23,334	458 19,684	321 9,909
TOTAL PARKS INCL. CALIF.	4,504	4,495	4,439	4,479	4,354	4,506	4,593	4,617
TOTAL SPACES INCL. CALIF.	403,289	376,774	350,155	336,796	305,472	295,402	293,526	156,762
TOTAL PARKS EXCL. CALIF.	2,394	2,392	2,374	2,333	2,279	2,448	2,393	2,413
TOTAL SPACES EXCL. CALIF.	176,278	160,803	153,192	144,059	132,272	135,295	134,489	69,061
AVERAGE SPACES PER PARK INCL. CALIF.	89.54	83.82	78.88	75.19	70.16	65.56	63.91	33.95
AVERAGE SPACES PER PARK EXCL. CALIF.	73.63	67.23	64.53	61.75	58.04	55.27	29.28	28.62

* Total rated park ** Total spaces ***Average space/park

Source: Compiled by PHII from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958; 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE

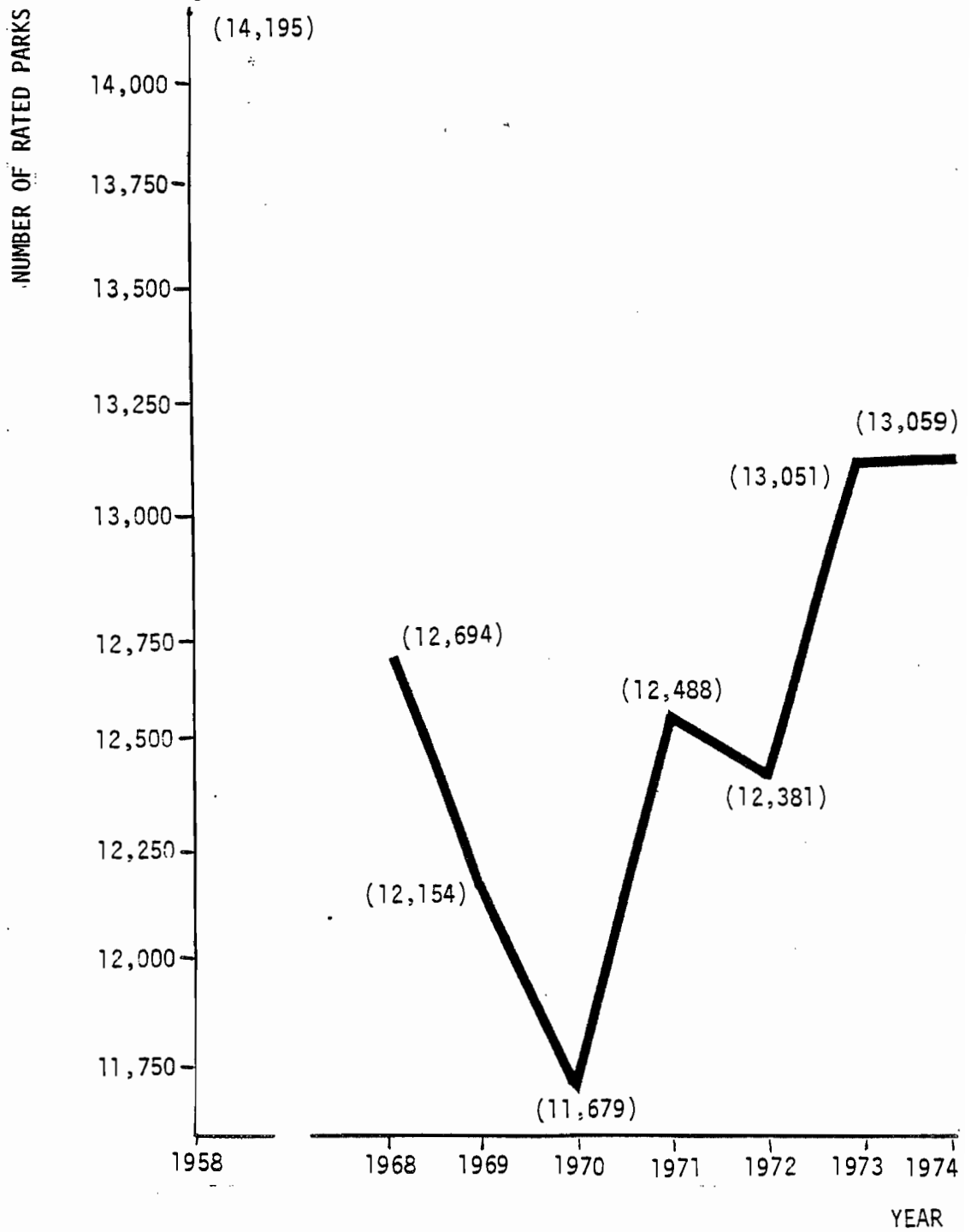
WEST con't

	<u>1974</u>	<u>1973</u>	<u>1972</u>	<u>1971</u>	<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1958</u>
TOTAL U.S.								
PARKS	13,059	13,051	12,381	12,488	11,679	12,154	12,694	14,195
SPACES	1,252,519	1,113,151	1,030,204	1,001,704	875,452	860,811	809,230	511,649
AVERAGE SPACES PER PARK	95.91	86.82	83.20	80.21	74.95	70.82	63.74	36.04

Source: Compiled by PMII from 1968-74 Statistics of Woodall's and the 1958 Trailer Topic Tabulations

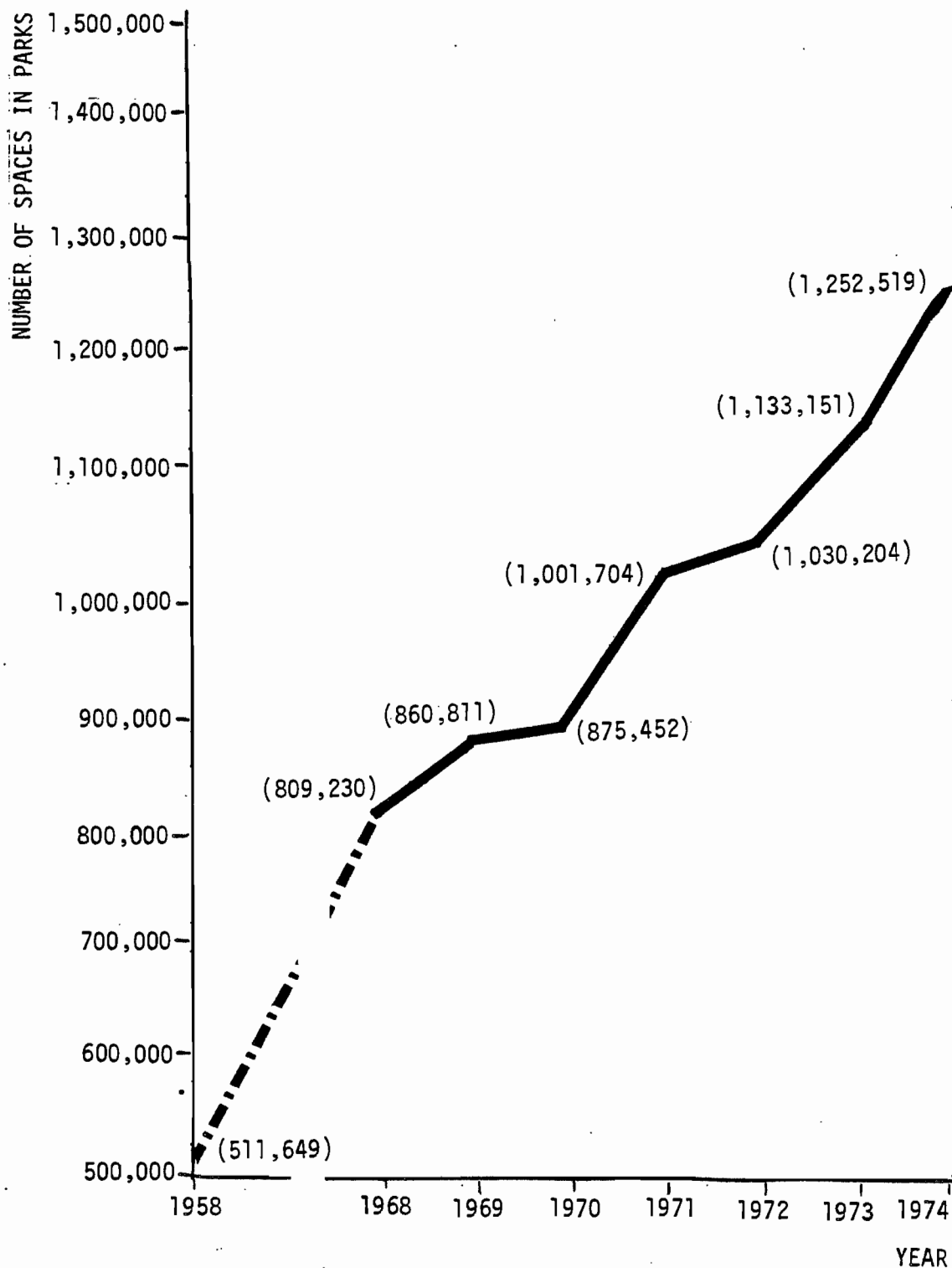
FIGURE 40:
(cont.)

WOODALL-RATED MOBILE HOME PARKS 1958: 1968-74
U.S. CENSUS REGIONS AND SUBREGIONS, AND BY STATE



Source: Compiled by PMHI from 1974 Statistics of Woodall's

FIGURE 41: TOTAL NUMBER OF RATED PARKS IN U.S. 1958; 1968-74



Source: Compiled by PMHI from 1974 Statistics of Woodall's

FIGURE 42: TOTAL NUMBER OF SPACES IN PARKS IN U.S. 1958; 1968-1974

The change in the number of spaces between the 1969 and 1974 reporting dates (about 400,000 park spaces), in spite of the net difference of only 905 Woodall-rated parks for the same period, indicates that the number of spaces/park for those parks listed by the Woodall Publishing Company has markedly increased during the period (70.8 spaces/park for the 1969 reporting date and 95.9 spaces/park for 1974). That the number of spaces/park has changed dramatically is evidence both that many of the newer parks are larger than the existing parks and that many of the older parks that have been dropped from the Woodall listing are smaller than those currently listed.

Regional Distribution

Further scrutiny of Figure 40 reveals the regional pattern of mobile housing distribution, and Figures 43 and 44 indicate the relative contributions of the various census regions and sub-regions in terms of rated parks and spaces. Again in 1974, the Western region leads the nation, with 4,504 of the rated parks, due largely to the predominance of California within the Pacific sub-region. However, a comparison with 1973 data indicates that in 1974, for the first time, the West has lost its lead in total sites to the Southern region. In any case, with 2,110 parks and more than 227,000 spaces, the state of California accounts for more than 47% of all the mobile home parks in the region. Similarly, the Pacific sub-region as a whole represents 65% of the rated parks in the Western region.

This imbalance may be partially accounted for by the fact that a majority

REGION	SUBREGION	NO. OF PARKS	NO. OF PARK SPACES	PERCENT OF PARKS
WEST	PACIFIC MOUNTAIN	4,504	403,289	<u>34</u>
		3,176	284,096	24
		1,328	119,193	10
SOUTH	SOUTH ATLANTIC	3,790	413,172	<u>29</u>
		2,089	286,945	18
		533	43,331	4
		968	82,896	7
NORTH CENTRAL	EAST NORTH CENTRAL	3,410	324,143	<u>26</u>
		2,127	220,370	17
		1,283	103,773	9
NORTHEAST	NEW ENGLAND	1,555	111,915	<u>11</u>
		459	31,103	3
		1,096	80,812	8
TOTALS		13,059	1,252,519	100.

Source: Compiled by PMHI from 1974 Statistics of the Woodall Publishing Company

FIGURE 43: THE NUMBERS OF WOODALL RATED PARKS AND SPACES BY CENSUS REGION AND SUBREGION

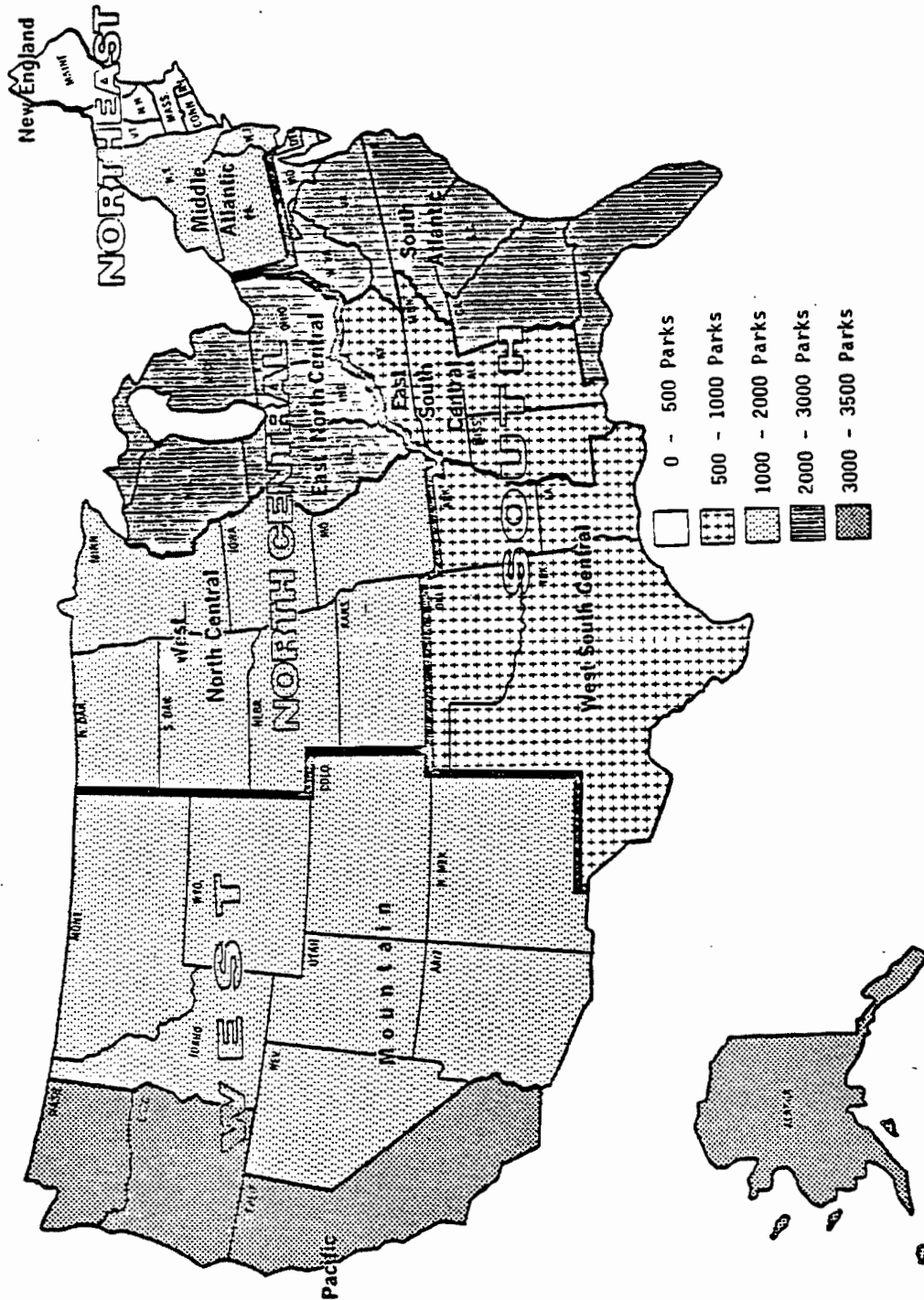


FIGURE 44: CONTRIBUTION OF WOODALL RATED PARKS BY CENSUS REGIONS AND SUBREGIONS

Source: Compiled by PMHI from 1974 Statistics of the Woodall Publishing Company

of the large population centers are in California, but factors such as climate and land-use controls are also important. Portions of the Western region, particularly California and Arizona, have long been considered especially attractive areas for retirement. Recent growth trends in Arizona, which ranks second to California within the region, suggest that the popularity of these southern areas as retirement communities has not diminished. This PMHI study projection, based on the 1973 data, is strongly supported by the recently released 1974 statistics. Mobile home parks in Arizona showed significant growth in all categories.

Although the Western region led the nation again in 1974, it did not lead in spaces per park, i.e. average park size (see Figure 45). In 1974, there was an average of 89.54 sites/park in the region as a whole (national average 95.91 sites/park) with a mean of 99.75 sites/park in the Mountain sub-region and 89.45 in the Pacific sub-region. The South showed an increase from 104.96 sites/park in 1973 to 115.09 sites in 1974.

By controlling for only those park sites and rated parks located in California, it is possible to observe an important phenomenon: the average size of the mobile home park within the region is sharply reduced from an average of 89.5 to 73.6 sites/park. Within the Pacific sub-region, the drop is even more severe from an average of 89.4 to 53.6 sites/park. The clear indication from these data is that a significant majority of the larger and therefore probably newer-rated parks in the Western region are located within the state of California. Because of this major reduction in park sizes outside of California, the data suggest most of the new park construction in

REGION SUBREGION	1974	1973	1972	1971	1970	1969	1960	1958
UNITED STATES	95.91	86.82	60.92	58.64	55.71	53.84	53.68	31.82
NORTHEAST	72.26	65.30	60.50	56.62	56.04	53.14	51.04	36.38
NEW ENGLAND	68.76	64.56	61.10	59.53	55.57	54.15	54.46	30.38
MID-ATLANTIC	73.73	65.60	83.68	82.39	75.49	67.48	60.83	40.91
NORTH CENTRAL	95.28	87.46	90.79	87.36	80.60	76.67	71.28	47.70
EAST N. CENTRAL	103.60	95.08	71.45	73.77	64.48	52.25	46.10	28.71
WEST N. CENTRAL	81.30	75.04	100.41	95.85	89.24	88.09	73.16	36.30
SOUTH	115.09	104.96	77.79	72.36	68.09	62.38	55.46	28.71
SOUTH ATLANTIC	87.14	80.76	112.78	115.40	107.92	109.80	90.39	43.06
EAST S. CENTRAL	125.35	124.90	75.23	70.20	52.96	58.40	56.38	25.45
WEST S. CENTRAL	75.10	66.54	74.75	60.00	61.24	50.02	44.33	27.90
WEST	85.63	70.45	78.88	75.19	70.16	65.56	63.91	33.95
MOUNTAIN	89.54	83.03	64.53	61.75	58.04	55.27	29.28	28.62
PACIFIC	73.63	67.23	76.00	71.72	66.75	61.74	64.55	28.74
	89.75	78.17	80.02	76.52	71.54	67.39	63.60	37.20
	89.45	86.18						
	53.55	53.61						

Source: Compiled by PMHI from 1) Statistics Obtained from the Woodall Publishing Company, 1968-1974; and 2) The 1958 Trailer Topic Tabulations

FIGURE 45:

AVERAGE NUMBER OF SITES PER PARK IN U.S. REGIONS AND SUBREGIONS

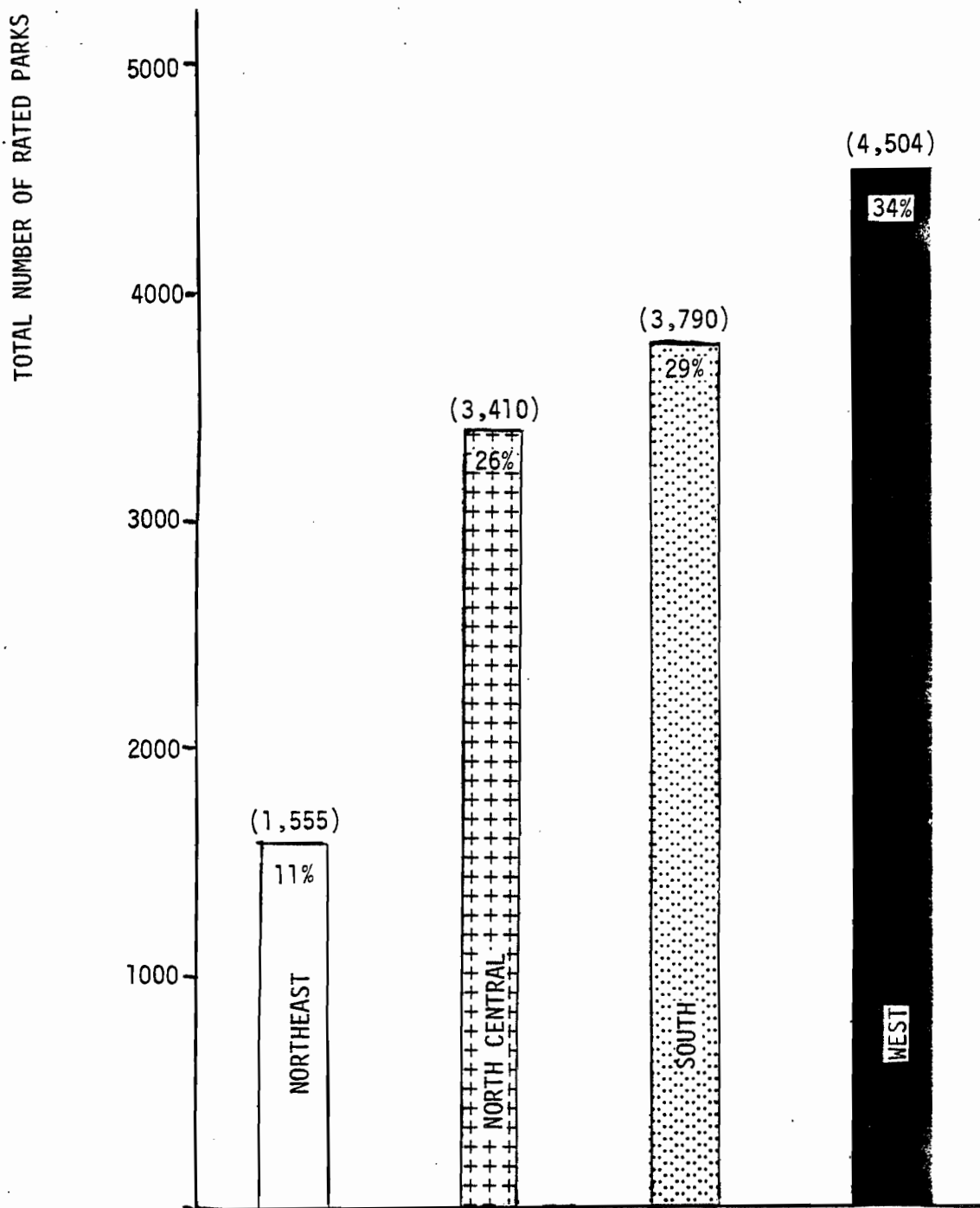
the region is taking place in a limited number of states.

Although trailing the West in total number of rated parks, the Southern region had taken the lead in total spaces (413,172) in 1974. As shown in Figure 45, it is far and away the leader in terms of average park size with an average of 115.09 sites/park. As in the Western situation, the Southern region is dominated by one state, Florida, within the South Atlantic sub-region. The 1,222 rated mobile home parks in that state represent over 35% of the total mobile home developments in the region. The South Atlantic sub-region as a whole accounts for 59% of the rated parks, while the remainder of the Southern region is represented by the East South Central sub-region, 13%, and the West South Central, 27%.

Heavily weighted by the presence of Florida, the overwhelming majority of these larger parks is in the South Atlantic sub-region (123.35 sites/park), as compared with East South Central (81.29 sites/park) and West South Central (85.63 sites/park). The importance of Florida to the region may be substantiated by excluding it from the total. The regional average drops sharply from 115.09 to 87.14 sites/park, while the South Atlantic sub-region mean plummets to 75.10 sites/park. Of significance, however, is the fact that even with Florida excluded, the Southern regional average park size remains close to the national average (95.91 sites/park). This result would indicate that there is much greater balance in the Southern region than in the Western region and that larger parks are being built in states other than Florida.

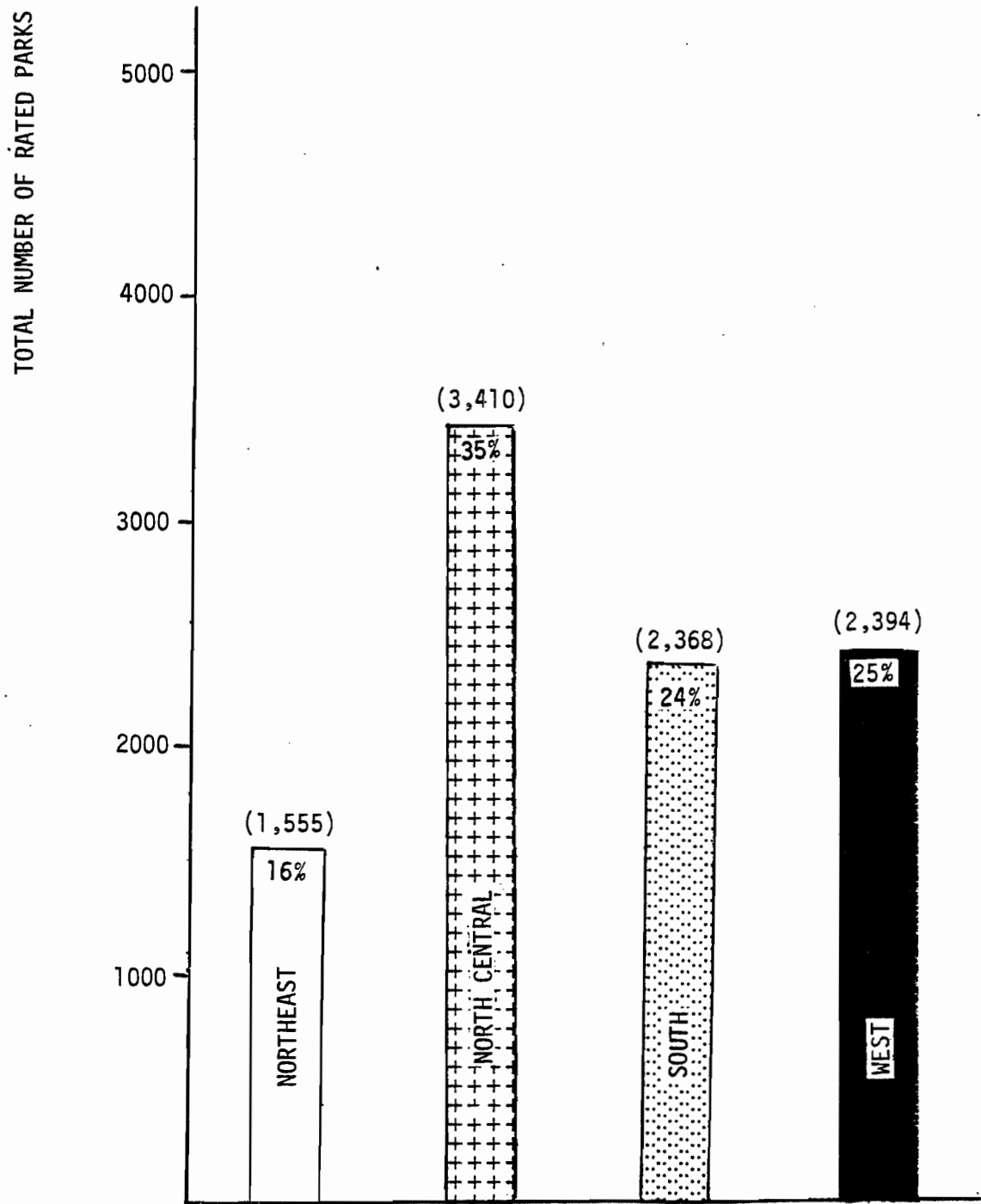
The general concentration in the Southern region is due to the same two factors as in the Western region: 1) a majority of the population centers are located south of Atlanta, and 2) the South Atlantic sub-region has continued to be a popular location for retirement communities, especially in Florida. To further illustrate the profound effects that the states of California and Florida have on their respective regions, the graphs in Figures 46 and 47 are presented. In the second graph, by excluding Florida and California, the relative share of total mobile home parks of these two regions becomes nearly equal. Moreover, the dominating influence of the Western and Southern regions on national distribution patterns is almost entirely eliminated. In conclusion, it is evident that the national data are, in a sense, "skewed" by these two states, which are literally in a class by themselves concerning the utilization of mobile housing.

The North Central region ranks third in terms of total number of rated mobile home parks with 3,410 establishments. Sixty-one percent of these are in the East North Central sub-region, while the remaining 39% are located in the West North Central sub-region. However, it is apparent from Figure 45 that the East North Central sub-region (103.60 sites/park) is second only to the South Atlantic sub-region in average size of parks. This may be explained largely by the fact that Elkhart, Indiana has been for many years the manufacturing center of the mobile housing industry. Thus, transportation costs are lower, stock is greater, and quite possibly there are fewer major impediments to development.



Source: Compiled by PMHI from statistics of the Woodall Publishing Company, 1974

FIGURE 46: TOTAL NUMBER OF RATED PARKS, BY CENSUS REGION, 1974 (INCLUDING FLORIDA AND CALIFORNIA)



Source: Compiled by PMHI from 1974 Statistics of Woodall's

FIGURE 47: 1974 TOTAL NUMBER OF RATED PARKS - EXCLUDING FLORIDA AND CALIFORNIA - (BY CENSUS REGION)

The Northeast region has the least number of rated parks (1,555) with only 11% of the total national distribution. Parks tend to be relatively small by national standards (72.26 sites/park) with 28% of the developments in New England and the remaining 72% in the Mid-Atlantic sub-region. Several factors have prevented more widespread use of this form of housing in the most populated region of the nation. In New England the severe winters cause higher fuel bills, quicker depreciation, and a need for better and more expensive insulation. Strict zoning constraints are in existence throughout the region, and, with the exception of certain rural areas in the extreme north (e.g. Maine), land prices are uniformly high.

Changing Regional Patterns

All regions of the United States are experiencing continued expansion in the size of mobile home parks. Regional distribution data are skewed by the overwhelming size and number of parks in California and Florida. The most rapid new park development is taking place in the "sun regions", particularly the Pacific (California), Mountain (Arizona), South Atlantic (Florida, Georgia), and West South Central (Texas and Oklahoma). This is largely in response to continued demand for retirement communities as well as for housing for families looking to beat the high cost of living in the northern climates.

Other regions continue to exhibit steady growth, both in the overall numbers of parks and spaces and in the average size of parks. Of note are the North Central sub-region, surrounding the mobile home manufacturing center, and the Mountain sub-region (Arizona and Colorado). In no area has the development of mobile home parks declined, although growth in the Northeast region has been relatively slow due to the many factors cited earlier (e.g., zoning restrictions).

State Distribution

Some general patterns have emerged in recent years concerning the siting of mobile home parks. For the past several years, the top twelve states, illustrated in Figure 40, have remained generally the same. Figure 48 presents the twelve leading states in 1974. Within the top five, there was no movement during the past five years. Growth predictions by PMHI were strongly fulfilled by Arizona, which has now surpassed heavily-populated Illinois to become number six in the nation. Within the second five-state grouping, Indiana also took a major jump, moving ahead of Pennsylvania from number ten up to number eight.

Within the Western region, California continues to lead the nation in total number of rated parks. Elsewhere in the region, attention has been drawn to Arizona, which has been undergoing a major degree of growth in the past few years with regard to total number of parks and

STATE	PARKS	SPACES	AVERAGE SPACES/PARK
CALIFORNIA	2,110	227,011	107.59
FLORIDA	1,222	206,811	169.23
MICHIGAN	492	66,465	135.09
OHIO	581	54,059	93.04
TEXAS	500	47,963	95.93
ARIZONA	475	47,602	100.21
ILLINOIS	422	41,358	98.00
PENNSYLVANIA	488	33,311	68.26
NEW YORK	487	32,238	66.20
INDIANA	405	40,812	100.77
WASHINGTON	549	27,577	50.23
MISSOURI	358	26,823	74.92
TOTAL	8,089	852,030	105.33

Source: Compiled by PMHI from 1974 Statistics of the Woodall Publishing Company

FIGURE 48: THE TWELVE HIGHEST RANKING STATES BY NUMBERS OF SPACES IN WOODALL RATED PARKS

spaces. The state of Hawaii bears mention due to its outright prohibition on mobile home park development.

Since Florida was discussed at some length above, mention need only be made that it has, on the average, the largest average-sized mobile home parks of any state in the nation (169.23 sites/park). Other states within the South Atlantic sub-region also contribute to the nationally-leading average park size. While none are among the leaders in terms of total parks or sites, Georgia (124.02 sites/park), Delaware (123.62 sites/park), Maryland (103.70 sites/park), and Virginia (97.91 sites/park) are all above the national average park size.

Of special note within the Southern region is the state of Texas. In one of the most remarkable increases in recent years, Texas jumped from only 217 rated parks with 18,775 spaces in 1972 to a surprising 500 parks with 44,569 spaces in 1973. Texas joined Arizona in continuing this strong upward movement in 1974. It also has led the West South Central sub-region in average park size.

The North Central region is dominated by those states contiguous to the Elkhart, Indiana, manufacturing center. The state of Michigan leads the sub-region in all categories and is of particular interest due to its extremely large average park size (135.09 sites/park). Illinois and Ohio are both in the top twelve states containing large numbers of rated parks and spaces, and their average rated park sizes

(98.00 sites/park and 93.04 sites/park respectively) are very large. Indiana, the manufacturing center of the mobile home industry, has also moved up strongly among the national leaders.

Due to the problems mentioned earlier, the Northeastern states have the fewest parks and sites even though two states of the Mid-Atlantic sub-region, Pennsylvania and New York, are represented on the top twelve list. The mobile home unit and park development are strikingly underutilized in the states of the "BosWash" corridor as compared to California, Florida, and Michigan.

Changing State Patterns

While the warmer regions of the nation continue to attract the most intense new park development, it is extremely significant that only one state (other than Florida), Texas, is in the top twelve list from the Southern region. One of the reasons for this is that mobile home owners often do not face the same degree of restriction concerning placement on individually owned lots, in the South as in other parts of the country. In addition, with the exception of Florida and Texas, park sizes are generally smaller -- more the "ma and pa" operation rather than the large-scale land developers.

Re-examination of the data including and excluding the states of

California and Florida, as in Figures 49 and 50, reveals some interesting facts. Of those states not in the "super-state" class (i.e., California and Florida), Michigan showed surprising strength in both 1973 and 1974. Clearly the leader in terms of total sites, its 492 rated parks also give it among the largest average size parks in the country (135.09 sites/park). Joining Michigan in this revised ranking are the states of Ohio, Illinois, and Indiana, giving the East North Central sub-region the largest representation in the top twelve list in terms of size of parks and population served. This is especially significant in light of the generally assumed domination by the Pacific (California) and South Atlantic (Florida) sub-regions.

Texas and Arizona again bear mention as the states which continue to show the strongest potential for expansion in mobile home park development. As cited earlier, Texas more than doubled its rated park capacity in the course of a single year. Arizona now shows every indication of becoming the next great area for retirement community expansion. Finally, new expansion was evidenced in the state of Missouri, moving up two ranks (from 12 to 10) in this "revised" top twelve list.

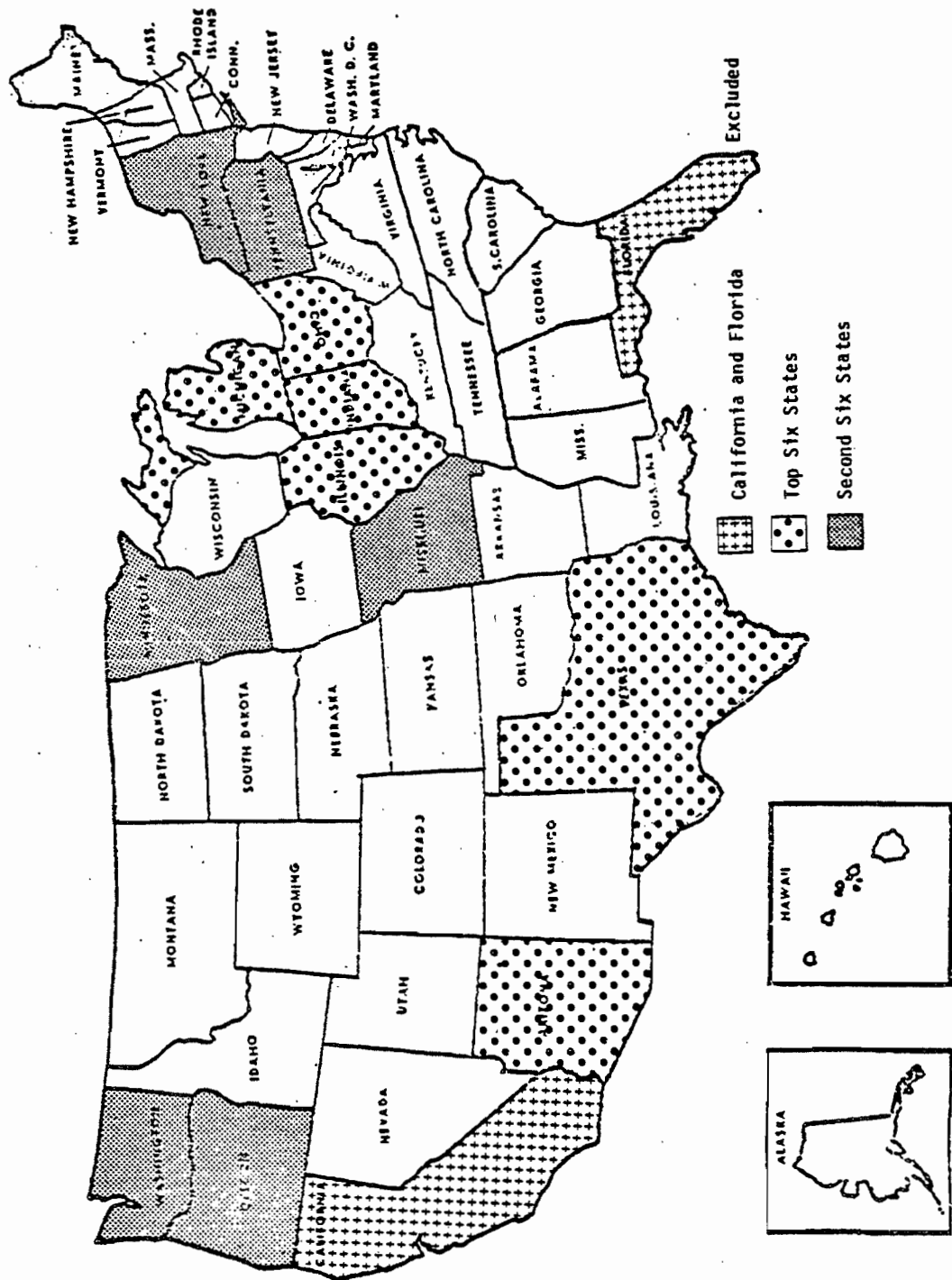


FIGURE 50: THE TWELVE LARGEST STATES (EXCLUDING CALIFORNIA AND FLORIDA) BY NUMBER OF WOODALL-RATED PARK SPACES

Source: Compiled by PMII from 1974 Statistics of the Woodall Publishing Company

2.2 CONCENTRATION

What is the degree of economic concentration in the mobile home industry's park system? The discussion here examines this question and looks at the characteristics and motivations of the multi-park owner as compared to the one-park owner.

2.2.1 Analysis of Expansion by Park Owners

National Patterns of Expansion

A majority of respondents to the PMHI Park Survey worked (managed, developed, or owned) in parks whose owners possessed only one mobile home park (70.3%). The percentages of respondents working in parks whose owners possessed two and three parks were, respectively, 12.4% and 8.6%. The average number of mobile home parks was 2.0, whereas the median rate of ownership was one. The average or mean is larger than the median due primarily to two respondents, one of whom reported working in a park which was one of 35 in a chain and another in one of a 20 park chain. The next largest total of park ownership cited was nine. While it is clear that some owners are engaged in at least a limited form of expansion (cf. 29.7% of the respondents reported working for owners possessing two or more parks), the degree of expansion is low and this survey of the park system has revealed further evidence of the atomistic nature of this industry.

Regional Patterns of Expansion

The frequency of owners possessing more than one park is higher in certain regions of the United States: the Pacific, the Western South Central regions, and, to a lesser extent, the Southern Atlantic region (according to the geographic designations employed by the Bureau of the Census). It should be noted that these regions currently have the highest rate of placement of new mobile homes.

The incidence of multiple-park ownerships still appears to be a limited phenomenon. The tradition of the small park operated on a husband-and-wife basis is well-known. Fred Hunt, Director of Program Development at the Mobile Home Manufacturers Association, has reported to the PMHI staff that, in his experience, most parks currently are "built, filled, and then sold". He has further noted that this process occurs most frequently with the larger parks and that many of these are purchased by husband-and-wife teams, who run them for a livelihood as well as an investment. Nevertheless, a number of organizations exist which are multiple-park owners (e.g. one located in New England had 30 parks in April 1974; on the same date a second firm, whose corporate headquarters are located in Colorado, had 39 parks; and a third, located in Los Angeles, California, has acquired approximately 100 parks through a number of partnerships).

The PMHI staff has recently communicated with several individuals from nine of the largest park-chain organizations about possible future trends in multiple-park ownerships. All agree that it is likely that the existence of such large ownerships will continue,

although the number of such organizations will be relatively small for at least the next decade. For example, the first two corporations noted above anticipate that they will each own approximately 200 parks in the foreseeable future. Thus, there might be ten such corporations owning 100 or more parks by 1985.

These large organizations will probably have a wide national basis. The organization located in Colorado currently operates parks in 12 states. A number of respondents to PMHI's special survey of nine existing large corporations have indicated that large regional organizations will also come into existence in the next decade, each owning up to 100 parks. These are thought likely to occur in such states or regions as Florida and California-Arizona and, to a lesser frequency, in the Mountain states and the Pacific Northwest.

The operation of these large multiple-park ownerships requires sound financial backing, management skills, and knowledge of the mobile home industry.

(1) Market research--The several problems that require solution prior to beginning development include: determining whether sufficient demand for park spaces exists in the locales for which the parks are being planned; exploring the types of services that the future parks' clientele will want; generating whatever forms of advertising are to be employed; and establishing working relationships with manufacturers and dealers.

(2) Park development--Besides constructing the park sites and

the services for the parks, development requires performance of a number of other procedures. Suitable land must be found and variances sought if existing zoning codes are written to prohibit park development, and capital must be established for land acquisition and construction of the park facilities. A significant part of the establishment of capital is the identification of sources of money at reasonable interest rates.

(3) Park operation -- Many of the immediate problems of operation involve money handling -- setting rents, monitoring cash flow, providing necessary and appropriate services, and purchasing supplies. Other questions for large firms to resolve would include -- what manpower should be employed during operation of the parks and what short cuts are possible in obtaining outside assistance and suppliers (e.g. snow removal, plumbing, gardening, etc.).

Thus, the level of sophistication needed would conflict with the traditional "seat-of-the-pants" operation of many of the older one-park ownerships. Of course, the prospective park owners can reduce the complexity of the task by purchasing the parks after other people had developed them or, even better, after other people had developed and operated them (thus providing known models for the operation of the parks). But in each of the latter two instances, the purchaser will likely have to pay a greater sum of money.

Large organizations may come about either through initial development or the purchase of existing parks. It is not evident which route is the more efficient. Theoretically, the simultaneous development of a number of parks in a regionalized area would be optimum because

possible efficiencies in organizing labor and construction equipment and purchasing building materials could be achieved (i.e. by aggregating demands for such items). But it is often not practical to do so because of the difficulty in simultaneously acquiring a number of tracts, establishing suitable zoning, and then securing sufficient capital. For example, the first two organizations noted previously--the New England and Colorado firms-- have indicated in their communications with the PMHI staff that they have grown primarily by buying existing parks. This presumes that parks exist to be purchased, having been developed previously by others.

In his communications a senior official at one of these organizations has noted the difficulties faced by developers of the "Mom and Pop" tradition, presumably because of zoning problems, tight money, and the problems of gaining managerial skills.

Thus, the processes of development and acquisition of parks can be characterized as being populated by two principal groups: 1) those who develop and sell and move on to build others and 2) those who buy from developers. This latter group appears to have three distinct subgroups: (a) the operators who own one park; (b) a significant, though relatively small number of operators (compared to those who own one park), who own a limited number of parks-- say two to five in a local area; and (c) a small number of large, multiple-park ownership organizations which are seeking to expand geographically and in terms of numbers of parks owned. It should be noted that these large ownership groups also perform their own development functions in a significant number of instances.

2.2.2 Characterization of the Multiple-park Ownership Organizations

Number of Spaces Accumulated by Multiple-park Ownerships

As noted above, 29.7% of the respondents to the PMHI Park Survey indicated that their park was a part of a multiple-park ownership organization consisting of two or more parks. For such multiple-park ownerships, the mean size was 662 spaces/ownership group with a median size of 200 spaces/group. Twenty-one percent of these multiple-park ownership organizations controlled 1,000 or more spaces. The largest such organization responding to the PMHI Park Survey stated that it controlled 7,600 spaces (based on an ownership of 35 parks). However, this sum is small compared to the Los Angeles company, described above, which controls in excess of 30,000 spaces over its 100+ parks.

It is interesting to note that, among these large multiple-park ownerships, the mean number of spaces in the parks of these organizations are well above the average size of all the Woodall-rated parks (95.0 spaces/park, based on its 1973 inspections). The Los Angeles organization averages about 300 spaces/park. The Colorado-based corporation has an average size of 290 spaces/park; and a Florida-based organization, currently controlling about 20 parks, has an average park size of 360 spaces, while the largest organization from the PMHI Park Survey averaged about 220 spaces/park.

The Ages of Such Multiple-park Ownership Organizations

This topic is essentially a two-fold question: principally, how old are the multiple-park ownership organizations; and secondly, how old are the parks which comprise these organizations? Because of the manner in which the PMHI Park Survey questionnaire was constructed, it was not possible to determine the ages of the various organizations reporting ownership of more than one park nor the ages of the several parks that make up these organizations. Considering the special PMHI survey of the several organizations, it is possible to develop some insight about the first question. Two organizations -- the Colorado and the Los Angeles corporations -- started quite recently, in 1969 and 1971 respectively. Others were begun in the middle 1960's, supporting the supposition that these large multiple-park ownerships are fairly recent phenomena. However, the New England organization, claiming to be the oldest multiple-park ownership in the United States, dates from well before 1950.

The ages of the individual parks which make up these large ownerships cannot be directly determined from the PMHI Park Survey data. It is apparent from PMHI staff's special survey of a number of these organizations that many of the parks presently being added come about through those companies' own development efforts. It would also appear that the large ownerships based in Florida and the Western states are composed presumably of relatively new parks (i.e. those developed in the last ten years.)

2.2.3 Concentration Ratios

The presences of parks nationally and by state have been dealt with in item 2.1 of this chapter. The focal point of this discussion is the degree of concentration manifested both nationally and regionally.

National Concentration

From the special survey conducted by the PMPI staff of nine multiple-park ownerships, it was clear that the level of concentration was quite low. At the highest level of apparent concentration is the Los Angeles-based group controlling approximately 100 parks and over 30,000 spaces: this organization represents only 2.0% of the national total of park spaces and only 0.4% of the total of national parks. The other organizations referred to earlier are comparatively smaller.

National estimates of the numbers of these multiple-park ownerships, drawn from this special survey, were correspondingly low: the number of organizations presently owning between two and five parks was set at about 150 ownerships, the number of companies owning between 20 and 50 parks was set at about five, and the number controlling more than 50 was projected as somewhere between one and five. Such estimates reinforce the generally accepted image of the national park system as a highly atomistic and unconcentrated industry.

Regional Concentration

The several large multiple-park ownerships with whom the PMPI staff has communicated are all nationally based, owning parks in two or three of the Bureau of the Census' geographical regions. Each of these organizations expects that the relatively national character will continue, thus negating any specific regionality for these organizations.

State and Local Concentrations

Significant local concentrations of ownerships do exist. This is implicit in the fact that some of the large national or multi-regional companies have begun their growth through local expansion. The Colorado-based organization, for example, controls six different parks in Denver, Aurora, and Golden, Colorado, representing about 22% of the park spaces (2,100 spaces) in the metropolitan Denver area. There are perhaps other such instances of local concentration, but these are limited in numbers. The opportunities for such organizations, provided by their sizes, are not immediately clear and thus require further investigation.

2.2.4

Summary and Conclusions

Presumably, the reason for the low level of concentration regionally or nationally is that the mobile home park system is the product mainly

of many individual entrepreneurs who have entered the park system without the apparent interests or capabilities for acquiring multiple-park ownerships. Most prospective owners enter the park system as lone investors with neither the capital nor the managerial experience necessary for forming an organization controlling two or more large-size parks.

It would appear that the motivations of the one-park owner and the multiple-park owner -- whether an individual, a partnership, or a corporation -- are expressly different. The one-park owner seeks to invest his capital in a park which will provide a livelihood and will not necessarily foster significant growth, whereas the multiple-park owner sets such growth as a primary goal from the start of operation. Encouragement for the formation of such large ownerships should be directed at new companies which start out with their goals set for growth, rather than at current owners who are successfully operating a single park. With this observation in mind, it would appear wise to consider further the existing large ownerships.

With the exception of the New England-based corporation, these companies have begun the formations of such ownerships comparatively recently and with the explicit goal of acquiring a significant number of parks. The reasons for the recent formation of these large ownerships are not clear other than possibly that a number of groups with sufficient capital realized that opportunities existed to make handsome profits in this industry. It is interesting to note that only a few established organizations with managerial experience in other related or non-related

fields and seeking opportunities for integration or diversification have entered this industrial area. Most of the organizations currently functioning as multiple-park ownerships began operation as new companies rather than as extensions of existing companies.

An additional important question could be asked about motivations that caused the New England corporation -- one that is decades older than the other large ownership organizations -- to acquire a large number of parks. The factors leading to its growth may not have been the same as those guiding the much newer organizations but may rather have been related to benefits associated with size.

It appears that a number of opportunities provided by the size of large ownerships (which are appreciably larger in terms of spaces per park than even large single-park ownerships) should encourage growth. Whether economies of scale exist for multi-park ownerships is unclear. However, the likelihoods for establishing highly developed managerial skills (at least at the corporate level) and the creation of workable practices for running parks, based on a sharing of experience and insight by the various managers could be real advantages. Large organizations should also enjoy enhanced abilities for securing funds for development and operation (presumably at lower rates than the one-park owners). Compared with the atomistic character and low rate of organization displayed by the park system, large ownerships should experience marked advantage over the one-park owners and be better able to uniformly provide a higher quality of site and service.

As noted in item 2.2.1, both regional and national expansions are likely through the continued growth of the existing large ownerships and the formation of new corporations devoted to this goal. It is also probable that such new formations will increase among investors from other industries who enter the mobile home park system for the first time upon discovering its potential for diversifying their holdings. The rates of return on investments in the park system have been good in the recent past and are likely to continue. But the growth of large ownerships from within the park system would appear to be unlikely, because existing levels of managerial and financial experience are generally inadequate for large-scale operations.

2.3 INTEGRATION

Two purposes sought in establishing vertical integration are increased stability and limited competition. Both of these purposes have meaningful application in the mobile home park system. The first, enhancement of stability, is widely employed by park owners who establish dealerships for the primary purpose of insuring that there will be tenants for their parks. Many, in fact, operate through contractual agreements with purchasers so that their homes will be located in that park which the dealer also owns.

The second purpose, limiting competition, may well be of importance on a local level, depending on how closely competitive mobile home parks are clustered. Theoretically, if dealers are relatively distant in a region of many parks, the park owner who also operates the one dealership in the area may have some control over how easily rival park owners are able to find tenants.

2.3.1. Distinguishable Patterns of Vertical Integration in the Mobile Home Park System

There are two distinguishable paths of vertical integration associated with the mobile home park system. These correspond to the two products which are combined to form the final mobile home park environment--the mobile home itself and the site upon which it is

located.

The production of the mobile home, including such primary issues as the supply and manufacture of the homes and the dealership system through which they are sold, has been previously described. By integrating the earlier stages of the mobile home production process into a unified business concern, a park owner may be able to increase his own stability. He may also be able to establish a position that will work to his advantage in competition with other park owners who may depend on his manufacturing or dealership facilities for their livelihood.

The same considerations must be made for vertical integration of park site development. Such integration would be exemplified by owners who had developed their own parks and who maintained the capabilities necessary for further land development.

2.3.2 Analysis of Integration by Park Owners

The major emphasis of the PMHI Park Survey was to examine the vertical chain through which homes, as opposed to sites, are produced. However, the survey did include one question which sheds light on integration of site development. "Are you the park manager? Owner? Developer?" In response to the question, nearly 42% answered that they had previously developed and were now the owners of the parks.

Thus, there is a significant quantity of vertical integration in the process by which mobile home sites are produced, extending from land development to the actual operation of the park. It should be noted that the actual size of the park and of the developmental process in any given case will have much to do with the potentialities for limiting competition. In particular, the 42% probably includes many park owners who required a once-only operation to develop their parks instead of a continuing involvement in land development operations which might convey control of the availability of site-production services to would-be competitors. The data from the PMHI Park Survey do not allow for any more exact analysis.

On the other hand, a good deal of data has been gathered about the degree to which park owners are presently integrated with other parts of the mobile home production process, as well as their future plans. In the case of park size, these data are difficult to interpret. For example, a park owner may claim to be a dealer though his dealership is too small to influence the supply of mobile homes to customers intending to rent sites in a competing park. The effects of integration on competition depend on how competitive the remainder of the vertical chain is. One should also note that the park owner, regardless of the size of his park, is attracted to vertical integration because he can either suggest or, in certain cases, demand that the purchaser's home be located in the owner's park. This process increases the owner's stability.

Geographic Analysis of Integration

Only 2.5% of the respondents to the survey stated that they were now involved or becoming involved in mobile home manufacturing. This low percentage suggests that vertical integration of the entire mobile home system by a given park owner is virtually unseen.

Small statistical bases made it impossible to consider systemwide integration by cross-sectional analysis. The survey did indicate, however, that 35.7% of the respondents had previously entered or were planning to enter the mobile home dealership business. This includes both dealers who sell new units and those selling both new and used units. The PMHI Park Survey data do not differentiate between park owners who resell units and conventional dealers. To further explore owner integration into the dealership system, a variety of demographic and financial characteristics are examined in the remainder of this discussion.

Figure 51 indicates that, regionally, a large proportion of park owners in the North Central and Southern Atlantic areas are also mobile home dealers. In the East North Central area 47.1% of the owner/manager respondents also act as mobile home dealers. This region is followed closely by the West North Central with 45.0%. In the South Atlantic sector, similar patterns are noted in 40% of the cases. The percentages observed were generally much lower in the western part of the country. Only 16.7% of the Pacific park owners and 22.2% of the Mountain area owners also engage in mobile home dealing. The small

REGION	INTEGRATED	NOT INT.	% INT.
New England	2	2	50.0
Middle Atlantic	4	1	80.0
South Atlantic	12	18	40.0
East North Central	8	9	47.1
West North Central	9	11	45.0
East South Central	0	3	0.0
West South Central	2	0	18.2
Mountain	2	7	22.2
Pacific	4	20	16.7

Source: PMHI Park Survey

FIGURE 51: PERCENTAGES OF PARK SURVEY RESPONDENTS INTEGRATED INTO DEALERSHIPS, CROSS-TABULATED BY CENSUS REGION

number of observations for the New England and Middle Atlantic regions do not permit any conclusions, even though the high percentages seem in line with the intuitive experience of high degrees of upstream integration into dealerships in these regions.

Cross-Sectional Analysis of Other Factors

Variance of Integration by Age

The percentage of park owners who are also dealers seems unrelated to park age. Of parks begun between 1950 and 1959, 38.2% of the owners stated that they were also dealers. The proportion was scarcely different for the 1960's, 36.6%. The first five years of the 1970's produced a 36.0% rate. Thus, no distinctions based on age are apparent from the data (see Figure 52).

Variance of Integration by Park Size

Most of the park system's integration with the dealership system is the work of those respondents owning parks with between 50 and 200 spaces. Of parks with 50 to 100 spaces, 22.7% had adjoining dealership operations. The figure was somewhat higher for parks of 100 to 200 spaces, 31.4%. Together, these two categories included 59.4% of the parks involving dealership integration, but they contained 70.9% of the owners responding to the question.

YEAR PARK BEGAN	INTEGRATED	NOT INT.	% INTEGRATED
1950-1959	13	21	38.2
1960-1969	15	26	36.6
1970-1974	9	16	36.0

Source: PMHI Park Survey

FIGURE 52: PERCENTAGES OF PARK SURVEY RESPONDENTS INTEGRATED INTO DEALERSHIPS, CROSS-TABULATED BY PARK AGE

The small samples in other categories make it difficult to discuss the extent of integration in any but the most cursory of ways. There were no park owners in the 0 to 50 space range claiming that they had integrated into the dealer system. Only six of the respondents owning more than 200 spaces claimed dealership activities.

Variance of Integration by Owner Origin

The results of the PMHI Park Survey indicate that 46.3% of those engaged in park and dealership integration had originally gone into park operation. Thus, the movement was vertically upstream in nearly half of the sample. Alternately, those who had evolved from being mobile home dealers to owning mobile home parks constituted 26.2% of the respondents to this survey question.

Results in other categories were sparse, with some relatively surprising results in the fields of land development and on-site residential construction. Of the park owners who also own dealerships, 14.3% had original experiences in land development operations outside the mobile home industry, while 9.5% had been involved in on-site construction.

The survey may or may not have uncovered the owner origins of a number of park owners also controlling dealerships. Of the respondents, 19.5% stated that they had become involved in parks as an outgrowth of other areas. However, those who commented about what these "other" origins were tended to give answers which were just personalized explanations of their going directly into mobile home park operation.

It is important to note that the survey question on "origin" was designed to elicit information on know-how transfer rather than on corporate expansion, integration, or diversification. Thus, the cross-tabulations of park owners' vertical integration into dealerships with owners' origins provide more of an analysis of the work experience of these owners rather than of the direction of corporate movement. For example, an owner who stated that he had originated in on-site residential construction may have been a construction worker who concluded that the ownership of a mobile home park was a good deal and one he could afford rather than an owner of a construction firm who decided to go into mobile home park operation. Many responses with comments suggest this pattern may be substantial if not prevalent and that the pattern should temper conclusions that can be drawn about origins which go beyond "original" experience.

Variance of Integration by POR on Equity

Data here are rather sparse and those which are available are very evenly distributed amongst a variety of ROR's ranging from 0 to 100%. The apparent difficulties that many park owners experienced in relating their financial condition to this standard of profitability also tend to place the results of cross-sectional tabulations in doubt. The only valid conclusion is that there are no strong trends in any direction.

Variance of Integration by Legal Form of Organization

The tendency of the respondent to integrate park and dealer operations increases with the complexity of the legal form of organization (see Figure 53). Of the park owners who stated that they were the individual proprietors of their parks, 31.7% were also maintaining or planning to expand into dealerships. A larger percentage of those respondents (38.5%) involved in partnerships displayed integration. A still greater percentage of those respondents (45.8%) who said that their ownership was of a corporate form exercised some control over dealerships.

2.3.3 Causality

There is a significant degree of vertical integration in the mobile home park system insofar as the dealership system is concerned. Such integration results from a natural inclination to link the sale of product and the establishment of site and community more than from any tendency towards aggressive expansion. This is probably due to the relatively simple manner in which many owners operate. This belief is reinforced by the extreme paucity of integration from the park system into the manufacturing system which generally requires considerable capital outlay.

With few exceptions, the regional and cross-sectional demographic and financial analyses tend to support the above interpretation of integration. The regional analysis indicates little trend toward integration in the more developed areas of the system, such as the Pacific region. Rather,

FORM	INTEGRATED	NOT INT.	% INT.
Individual Proprietor	20	43	31.7
Partnership	10	16	38.5
Corporation	11	13	45.8

Source: PMHI Park Survey

FIGURE 53: PERCENTAGES OF PARK SURVEY RESPONDENTS INTEGRATED INTO DEALERSHIPS, CROSS-TABULATED BY "LEGAL FORM OF ORGANIZATION"

it suggests that some of the more generally dilapidated parks in the system-- the North Central and South Atlantic areas (with the exception of Florida)-- have the highest proportions of park owners who are also dealers.

Our analysis by park age indicates no significant trend toward integration among newer park owners who tend less frequently to be "ma and pa" owners of the past. Though the newer parks are often owned by a single family, these parks seem more sophisticated than their "historical" predecessors. Consideration of profitability based on equity return offers no insights at all because of insufficient data.

The consideration of a possible relationship between the number of park spaces owned as a measure of major corporate activity and the degree of vertical integration does not lead to affirmative results. What is clear from the analysis is that most park owners are clustered in the category of owning 50 to 200 park spaces and a similar proportion of integration occurs within this range. There is little indication that size appreciably affects the likelihood of an owner's being a dealer-park operator.

Consideration of owner origin substantiates a variety of logical conclusions but few of them pertain to the causalities of integration in the mobile home park system. Most park owners tend to enter directly into park ownership as an occupation and then branch into dealership, rather than the other way around. The survey was distributed to park owners as a primary base. When a questionnaire (PMHI/DS) was sent to dealers who also chanced to be park owners, the proportion was quite different.

A sizeable proportion of respondents to the PMHI Park Survey stated that they were involved in land development operation, some directly involving on-site residential construction. Such developmental operations have been noted previously in the discussion of the integration path by which the mobile home site is produced and owned by the respondents. As such, the data suggest a crossover from the one vertical path to the other, intersecting at the mobile home park ownership level.

The one strong indication that the observed patterns of integration may be associated with major business activity derives from the cross-sectional analysis of the survey by the legal form under which the park is organized. As the system moves from more simple to more complex organization, the tendency toward integration seems to increase. However, the major consideration is how closely complexity of legal form of organization correlates with the scope of the activities of that organization. The survey data do not effectively resolve that question.

2.3.4 Emerging Trends

Because data gathered for the questions of whether a respondent was "now in" or "planning to enter" were coded into clusters for overall ease of data handling, it was not possible to determine changing trends with any effectiveness from these survey questions. There are indications based upon the cross-sectional analysis of park age and integration that patterns have remained fairly constant over the past twenty-five years. The data present no reason to conclude that this will change in the foreseeable future. However, conditions under which change is likely to occur can be hypothesized.

During the period under study, the mobile home park system tended toward complexity through increased size, expanded quality of services, and total costs. As such, one would expect that integration, in this case the purchase of dealerships, would increase. The likelihood of manufacturing firms being acquired also becomes greater. Similar trends in the dealership and manufacturing sectors will result in increased park purchases. The entire mobile home system's growth as an industry would probably lend itself to increased integration.

On the other hand, such a growth would tend to reduce the "ma and pa" operators who also sell homes in a used car lot and are considered to be integrated under the analysis of the PMHI Park Survey. The overall effect might be an initial reduction in integration followed by a gradual increase until a socially desirable level would be reached.

2.3.5 Summary and Conclusions

There is evidence of a considerable amount of integration in and adjacent to the mobile home park system, though virtually none of it extends beyond the dealership level. This integration is largely found in the eastern and central parts of the country and somewhat more likely among newer parks of the 50-200 units size. There seems to be no relationship to profitability.

All of these results suggest that the integration patterns observed are being caused by small park owners rather than those owning large

parks or many parks. Only one part of the analysis -- that of the legal form of the ownership of the parks which are vertically integrated with dealerships -- would draw question to this conclusion. The tendency to integrate increases as the complexity of organization increases. By itself, however, this tendency would seem to be an insufficient objection to the conclusion that the integration is going on among small-scale operators.

As already stated, this integration pattern by small park owners will depend on the local availability of alternatives. While the PMPI Park Survey suggested that 81.2% of the park owners have competition within ten miles, there are clearly areas where competition is inhibited due to the zoning policies of local governments. Connecticut provides an example of this through a report issued by their Attorney General's Office which claimed that restrictive zoning policies had created many local monopolies.

In conclusion, the considerable extent of mobile home park system integration need not have major implications for the performance of the system, though implications are more likely when integration is the work of major firms, or when it is occurring in highly restricted localities. This results in restrictions not only upon the parks but upon dealership activities as well. As such, it is not likely that the observed integration is responsible for major economic patterns in the system.

2.4 DIVERSIFICATION

Diversification is the movement by a firm into an area of business activity which is not directly related to the type of activity in which it was initially engaged. In general, diversification may be undertaken for two reasons. First, diversification may increase the market power of the firm by enabling the firm to compete in markets for goods which are reasonable substitutes for the goods which it initially produced. Thus, a park owner who begins to produce conventional housing is in the position of being able to fulfill a basic demand for housing in two different markets and is in a stronger market position in both. Second, diversification may provide an alternative area for investment of funds when there are limited attractive investment opportunities within the firm's initial area of activity.

2.4.1 Analysis

The PMHI Park Survey polled park owners and operators on whether or not they had diversified or were planning to diversify into the following fields:

mobile home consumer financing, recreational vehicle park development, on-site residential and non-residential construction, production and distribution of building supplies, or other businesses. In the case of this last category, respondents were requested to make further specifications, but few did so.

Geographical Analysis

National

The mobile home park system shows a sizable amount of overall diversification though it is only slightly diversified into any one of the target industries (see Figure 54). Of the survey respondents, 14.1% stated that they were either now in or planning to enter the field of recreational vehicle park development and 6.4% of those were already in the field. This was the largest single field of diversification noted. The second largest category on a national level, 9% of the respondents, was diversification into on-site residential construction. All other categories were far behind; none of the respondents had diversified into the production of building supplies. Those who stated that they should be listed in some other unspecified category totaled 8.0%.

It also appears that many of the park survey respondents are unsure of the present or future state of their business concerns. Fully 32.1% did not know whether or not the business either planned to or

ACTIVITY	DIVERSIFIED	NOT DIVERSIFIED	% DIVERSIFICATION
TRAILER-RECREATIONAL VEHICLE PARK-DEVELOPMENT	11	67	14.1
MOBILE HOME CONSUMER FINANCING	3	75	3.8
ON-SITE RESIDENTIAL CONSTRUCTION	7	71	9.0
ON-SITE NON-RESIDENTIAL CONSTRUCTION	4	74	5.2
PRODUCTION OF BUILDING SUPPLIES	0	78	0.0
DISTRIBUTION OF BUILDING SUPPLIES	2	76	2.6
DO NOT KNOW	25	53	32.1
OTHER	7	71	8.9

Source: PMHI Park Survey

FIGURE 54: TYPES OF DIVERSIFICATIONS CITED BY PARK OWNER-RESPONDENTS

had already diversified into other areas; 16.7% indicated that they did not even know the present state of diversification of their firm. Surely, much of this uncertainty is related to the fact that 16.9% of the surveys were completed by someone who was not the owner of the park, and that many of them might not have been at all sure of the owner's intentions or, for that matter, the real extent of the owner's or corporation's presently diversified holdings.

In the PPHI Park Survey the only categories of diversification with any possibilities for concentrated market power were on-site residential construction and trailer and recreational vehicle park development. Not surprisingly, they were also the major areas toward which firms diversified.

Because of the small percentages for many other categories of diversification presented in the PPHI Park Survey, various cross-sectional analyses are impossible. Diversification into areas other than the two main target fields will, therefore, be discussed generally as one phenomenon rather than broken down into many categories. This is a sensible approach because of the limited practical value of most categories of diversification. Even so, the differential effects of various categories of diversification may serve as a measure of the financial success of the industry.

Regional

Distribution of mobile home parks with diversified business interests tends to be the heaviest in the Pacific, the West North Central, and Middle Atlantic regions of the country (see Figure 55). Of the Pacific respondents, 24% stated that they had engaged in some sort of diversification; in the West North Central region, 25% had diversified; and 60% in the Middle Atlantic region. (However, there were only five respondents for this last region.)

Diversification into recreational vehicle park development totaled 9.5% in the South Atlantic region and 7.7% in the Pacific region. In the case of entry into on-site residential construction, these figures are 4.8% and 7.7%, respectively.

Cross-Sectional Analysis of Other Factors

Variance of Diversification by Park Age

The tendency of mobile home park owners toward diversification decreases with the age of the park as is illustrated by Figure 56. None of the respondents whose parks had been developed during the '40's had diversified. Some form of diversification had been engaged in by 11.1% of those whose parks had been developed during the '50's. This figure increased

REGION	DIVERSIFIED	NOT DIVERSIFIED	% DIVERSIFICATION
NEW ENGLAND	1	3	25.0
MIDDLE ATLANTIC	3	2	60.0
SOUTH ATLANTIC	5	26	16.1
EAST NORTH CENTRAL	3	14	17.6
WEST NORTH CENTRAL	5	15	25.0
EAST SOUTH CENTRAL	0	3	0.0
WEST SOUTH CENTRAL	2	10	16.7
MOUNTAIN	2	10	16.7
PACIFIC	6	19	24.0

Source: PMHI Park Survey

FIGURE 55: PRESENCE OF DIVERSIFICATION CITED BY PARK SURVEY RESPONDENTS,
CROSS-TABULATED BY CENSUS REGION

to 24.4% of park owners whose parks were developed in the '60's. Finally, 44.4% of owners sampled from the current decade stated that they either had already diversified or were planning to diversify.

These trends changed somewhat in the particular cases of on-site residential construction and recreational vehicle park development.

In the case of the former, a greater tendency to diversify was observed for the 1960's and '70's than for any other period, and the two periods were roughly comparable to one another. Fourteen point three percent of those parks developed in the 1970's and 11.1% of those from the 1960's were owned by individuals or groups who either had diversified or were planning to diversify into on-site residential construction. None of the respondents whose parks had been built during the 1950's had diversified via on-site residential construction.

Quite different results were observed for those respondents diversifying into recreational vehicle park development. A great deal of diversification activities (28.6% of respondents) was initiated by parks developed during the present decade, and, surprisingly, by parks developed in the 1950's as well (18.8%).

Variance of Diversification by Origin

Most park owners engaging in diversification either originated in land development (25%) or began their careers in this industry as park operators (40.7%).

YEAR PARK BEGAN	DIVERSIFIED	NOT DIVERSIFIED	% DIVERPSIFICATION
1950-1959	4	32	11.1
1960-1969	10	31	24.4
1970-1974	12	15	44.4

Source: PMHI Park Survey

FIGURE 56: PRESENCE OF DIVERSIFICATION CITED BY PARK SURVEY RESPONDENTS,
CROSS-TABULATED BY PARK AGE

Variance of Diversification by ROR on Equity

Analysis of the PMHI Park Survey data did not lead to clear conclusions about the relationship between the tendency to diversify and the degree of profitability. Based on sparse samples, it was discovered that the rate of return (ROR) on equity ranges from 0 to 5% and from 15 to 20% for most diversified firms. Of the diversified park owner-respondents, 30.8% were in the former range, while 23.1% were in the latter. Only 7.7% of these respondents claimed a rate of return on equity of from 10 to 15%.

One may also consider the likelihood of those within a given equity range to diversify. The 0 to 5% and 15 to 20% are still the major contributors, with 40.6% of those in the first range diversifying, while 37.5% of those in the latter range have diversified or are planning to do so. What is interesting, however, is that the tendency to diversify is distributed fairly well throughout all equity ranges. The group showing the least tendency to diversify was the one with an ROR on equity greater than 20%. Still, 16.7% of the respondents in that group claimed involvement in some sort of diversification.

The results of cross-tabulations -- as a measure of the success of establishing diversification -- between the ROR on equity and the presence in the specific areas of 1) recreational vehicle park development and/or 2) on-site residential development were very sparse. For recreational park development, the tangible results were few and almost

equally distributed, with a slight bulge at 0%. The same was true for on-site residential construction, except that the bulge was located at the 10 to 15% equity level. No meaningful conclusions can be justified.

Variance of Diversification by Park Size

Most evidences of diversification occurred among respondents who indicated that their parks contained between 0 and 100 spaces. Sixty-five point four percent of the total number of diversified park operations found by the PMHI Park Survey appeared in this range. This is not particularly surprising, insofar as 71.9% of the total parks for which responses were received fall into this size group themselves. Parks of low to medium size levels do not tend to diversify their operations in equal proportion to those running larger operations. This may be illustrated by considering the trends toward diversification within each particular size category. Of respondents owning a park of between 0 and 50 spaces, 15.7% stated that they had either diversified or were planning to in the near future. That percentage increased to 25.0% for the park owner group between 51 and 100 spaces. It fell to 13.6% for owners between 101 and 150 spaces, then returned to 25.0% for the next fifty, and finally, was 100% for those owning parks with more than 300 spaces. These last two categories were based on very few responses.

Upon considering diversification into recreational vehicle park development, one finds almost all of the activity in the low to moderate ranges (i.e. parks with 0 to 100 spaces). Of the parks diversifying,

72.7% fell into this range. The results were only slightly more broadly distributed for owners who had specifically diversified into on-site residential construction, but this may be due to the smallness of the sample and not to the actual population distribution values. One of the three owners who was in the greater-than-300-space park range answered the question of diversification into on-site residential construction in the affirmative.

Variance of Diversification by Legal Form of Organization

There appears to be a markedly stronger tendency for partnerships and for corporations owning mobile home parks to diversify than there is for individuals (see Figure 57). Only 11.5% of those respondents who stated that their park was owned by one person were also engaged in some form of diversification. This provides a sharp contrast to the 38.5% of parks owned by partners, and the 32.0% owned by corporations who had diversified.

However, the differences in absolute numbers between types of legal organization are small. Of the parks with diversified holdings, 30.8% traced back to individual ownership, 30.5% to partnerships, and 30.3% to corporations. Thus, the actual contribution to industry diversification from each sector (individual, partner, and corporate ownership) seems quite balanced.

The tendency toward diversification into recreational vehicle park

LEGAL FORM OF ORGANIZATION	DIVERSIFIED	NOT DIVERSIFIED	% DIVERSIFIED
INDIVIDUAL PROPRIETOR	8	61	11.6
PARTNERSHIP	10	16	38.5
CORPORATION	8	17	32.0

Source: PMHI Park Survey .

FIGURE 57: PRESENCE OF DIVERSIFICATION CITED BY PARK SURVEY RESPONDENTS, CROSS-TABULATED BY "LEGAL FORM OF ORGANIZATION"

development is even. Of individually owned parks 14.7% are involved in this form of diversification, while 15.8% of those owned by partners and 15.8% of those corporately owned are also so diversified according to the PMHI Park Survey. The data also suggest that diversification by partnerships or corporations tends to be more planned as opposed to individual diversification. Once again, these are small samples, and it is difficult to do little more than speculate.

In the case of on-site residential construction diversification, the tendency seems to increase with the complexity of the legal form of organization. Of the individual proprietors responding to these questions, 2.9% answered in the affirmative. That percentage increased to 10.5% in the case of partnerships, and to 15.8% for corporations. It is interesting to note that 50% of all those diversified into this field were owned through corporations.

2.4.2 Causality

Our analysis of regional variation of diversification leads to some anticipated and unanticipated results, regarding the more successful parts of the industry, such as those parks located in California and in Florida. The West Pacific region was a significant contributor to diversification, but the South Atlantic was not. In fact, the West North Central and Middle Atlantic regions were important areas for diversification. This may suggest that the sample was skewed, or that diversification is not as effective a measure for financial success as

it should be. Firms in the areas mentioned above may have been financially successful and may have diversified, but their absolute size scale (both of the park and of its diversification) may have been smaller.

More conventional and expected results were found in the analysis by age, with the most recently developed parks (which tend more commonly to be owned by professionals than by "ma and pa" operators) showing more diversification than the older ones. In the case of overall industry diversification, this pattern is a very steady one. While there seems to have been some bulge of diversification into trailer and recreational development in parks developed in the 1950's, this phenomenon remains unexplained.

The examination of owner origins for parks engaging in diversification indicates that the major areas involved owners who had gone straight into park operation and land development operation, which is horizontally related to park development. These same patterns held for the two specific areas of diversification analyzed (recreational vehicle park development and on-site residential construction).

The ambiguous results observed in the cross-sectional analysis of diversification by the rate of return on equity may be explained by the paucity of data from respondents and their lack of understanding for the question on equity. Naturally, it would be expected that diversification would increase in a very like manner to the rate of return, as a measure of profitability. On the contrary, the data

suggest diversification bulges at the 0 to 5% and 15 to 20% levels. One might speculate that owners at these levels may have very different notions of diversification, but the PMHI/DS and other employed data do not support this conclusion. The subject would be worthy of future analysis.

It would be expected that the number of spaces in a park might be a crude indicator of the success of its owner(s) and, therefore, that diversification would tend to increase with size. This was the trend generally observed, with one unexplained drop in diversification activities occurring for the group between 100 and 150 spaces.

Lastly, according to the PMHI Park Survey, diversification increases as the complexity of the legal organization of park ownerships increases. The legal form of organization is related to the size of the business enterprise, as has already been discussed. Such a relationship is expected due to the connection of diversification to both the degree of financial success and the scale of financial activities.

The cross-sectional analysis above also indicates that the relationship between diversification into recreational vehicle park development and the legal form of organization is somewhat different from that of total diversification to the legal form. The trend toward diversification appears to be quite equally distributed among each legal form. Once again, this may reflect owners' different notions of what activities

actually constitute diversification. The pattern was more along expected lines for on-site residential construction, diversification increasing with the complexity of ownership.

2.4.3 Emerging Trends

Emerging trends in diversification of the mobile home park system are difficult to distinguish, because of the manner in which respondents answered the questionnaire. The survey questioned respondents as to whether or not they had diversified or were planning to diversify by 1974 which was, at that time, a test of future intentions. Most were not planning to diversify at that time. This is an indication of operator understanding or unwillingness to respond to a very limited question rather than an indication of little future diversification.

A better indicator of future diversification patterns is park age. As has already been stated, the newer parks show the strongest trend toward diversification. This is a sensible pattern if one assumes the apparent increasing influence of larger and more complex corporate structures on the industry. Under such conditions, increased diversification may be anticipated.

2.4.4 Summary and Conclusions

There is a good deal of diversification in the mobile home park industry, particularly into fields with horizontal implications, such as on-site residential construction and land development. This is understandable because diversification provides the means for a firm to increase market control through influence over substitute markets. The PIII Park Survey does not indicate that this increase in power has occurred with any regularity, but incentives will remain until legal or economic constraints make the acquisition of such substitutes impossible.

Judging from the degree to which diversification into these fields occurs, one may conclude that owners continue to feel these incentives.

It may also be concluded that diversification is an indicator of the success enjoyed by the park owner. An analysis of park age, the number of spaces in the park, and the legal form of organization of the park all lead toward this conclusion. More ambiguous results occurred with regard to the regional placement of parks and their rate of return on equity, but not enough to challenge the concluded correlation between diversification and the scale of the park operation.

These patterns did not hold up as well for the particular types of diversification -- residential on-site construction and recreational vehicle park development -- that were considered. The results were most

ambiguous for the cross-tabulations with region, rate of return on equity, number of spaces, and legal form of organization. In several of these cases, however, the samples were rather small and should be considered in that light. Otherwise, the results were in fair agreement.

To the extent that new trends in the system were visible, they would seem to suggest a continuing diversification. This diversification has generally neutral effects on economic efficiency, but it may be seen as an indicator of an industry undergoing new growth.

2.5 ECONOMIES OF SCALE

Do economies of scale exist in the mobile home park system, and if they do, are they factors in both mobile home park development and operation? The PIHI staff has attempted to determine specifically to what extent economies or diseconomies of scale exist, whether economies of scale act as barriers to entry, and whether an optimal park size exists above or below which efficiency is notably impaired.

2.5.1 Economies of Scale in Park Construction

Three main functions of park development offer potential economies of scale: planning, purchasing, and construction. Total costs per park space for design, planning, obtaining of regulatory approvals, and securing of financing decrease as the scale of operation increases. These economies, obviously, are greatest for companies specializing in park development and having in-house staff for these activities.

Purchasing economies are also evident during park construction. Costs of materials are likely to fall as the size of the park and the quantity of needed materials increase. By purchasing large quantities of asphalt, cement, piping, etc., substantial cost savings per park space can be

obtained. Truly significant purchasing economies can be achieved by large firms which are simultaneously or sequentially developing several parks in a given area.

Finally, technical economies of scale can be realized in park construction. Heavy construction equipment can be used more efficiently on large projects. Cost savings can be achieved by reducing transportation costs of heavy construction equipment; no additional transportation costs are incurred in constructing an additional 100 park spaces if the equipment has already been moved to the site to construct the first 200 spaces. Larger scale park projects are also likely to have lower per-space labor costs and are more likely to capture the attention of large established construction firms which tend to have the highly specialized labor force, heavy equipment, and know-how to efficiently complete a quality job.

The data available from the PMHI Park Survey did not permit the quantification of different types of economies of scale associated with park development. Econometric analysis proved impossible since the development costs reported were for parks of different quality, built in different years in different regions. However, general evidence on the existence of economies of scale in park construction was discovered. This information is given in a later section ("Cost/Price Analysis").

2.5.2 Economies of Scale in Park Operation

The larger the park the larger the resident population over which fixed and certain variable costs can be spread. This lowers the average

operating costs per park space, achieves economies of scale, and makes possible many facilities and services less commonly found in small parks. From the PMHI Park Survey, it was evident that larger parks were apt to provide more recreational, sporting, and religious facilities than smaller parks. Large parks are also able to take advantage of savings and benefits that accrue from the division of labor. Whereas small "ma and pa" park operations often require the owners to assume many roles (i.e. manager, maintenance personnel, accountant, social director, etc.), large parks are able to hire specialized individuals.

For lack of adequate data, economies of scale in park operation could not be reliably quantified. General field experience as well as the data generated by PMHI's Park Survey do, however, suggest that these economies are probably substantial. Economies of scale in park operation are important for both the park owner and the resident; economies influence profitability as well as occupancy costs.

2.5.3 Summary and Conclusions

Economies of scale operate in park development as well as in park operation. Average costs per park space (i.e. the cost of constructing and operating a park) fall as the size of the park increases. Unfortunately, there is no comprehensive set of data which can be used to quantify the cost-scale relationships necessary to determine the extent of existing economies of scale, whether scale economies act as entry barriers and whether an optimal park size exists.

A major study directed toward quantification of scale economies in park development and operation is needed. Hard evidence on this phenomenon would provide both the industry and the public sector with an input important for determining and encouraging an optimal firm and industry structure.

2.6 BARRIERS TO ENTRY

Two potential barriers to the entry of new competition into the mobile home park system were studied: absolute cost barriers and product differentiation.

2.6.1 Absolute Cost Barriers

There are three major barriers -- land costs, development costs, and the cost for obtaining favorable zoning. Detailed information on factors contributing to these barriers can be found in other parts of this report, particularly in the section on "Cost-Price Analysis" in this volume and the section "Land Use Controls" in Volume V.

The cost of land is substantial and varies dramatically among regions and among rural, suburban, and urban areas. In certain regions and in many suburban and urban situations, this cost will constitute a significant barrier to entry.

Development costs are high, increasing, and as much of a hindrance to free entry as the costs of land. They vary from area to area because parks in different areas are built to different quality standards and supply their customers with different services.

Industrial Organization

For instance, retirement parks located in California or Florida will require greater funds for construction than a two-star park in New England.

The cost of "obtaining zoning" is the cost incurred in order to convince the local government to alter restrictive zoning practices. In many cases, these practices are immutable and no amount of money and effort will be enough to overcome discriminatory land-use control attitudes. Such inhibitive zoning ordinances cause cost barriers to entry to become infinite. This fixes the available supply and allows those owners who were established prior to the adoption of an ordinance to collect Ricardian rents in excess of the prices that a competitive framework would permit.

It is difficult to assess the degree to which these absolute cost barriers inhibit competition. The vast majority, 83.2% of the PMHI/PS respondents, claimed that there were parks within ten miles, a reasonable proximity, offering similar services. This would suggest a competitive environment, but several other factors need to be considered. First, there is the question of similarity of parks' orientation. For instance, a two-star park would not normally be a serious competitor to a five-star park within ten miles. Secondly, truly similar parks located near one another may prefer to work together to realize the highest possible profits rather than compete. For example, overly restrictive zoning practices in Connecticut seem to have created monopoly pricing situations (See item 2.3 on integration.)

2.6.2 Product Differentiation Barriers

Analysis

The second barrier to entering the park system is the cost of overcoming product differentiation. Analysis of product differentiation within an industry is most commonly undertaken by studying advertising patterns and techniques. The same approach was followed here. It was discovered that advertising, as practiced by park owners, creates only minimal distortions in the consumer mentality and does little to contribute new barriers to entry.

The major advertising techniques used are newspaper advertisements (34.2% of the PMHI/PS respondents) and highway signs (22.8%). The other forms of advertising polled were less utilized: radio messages (7.0%), television (3.5%), signs in stores (1.8%). Word-of-mouth advertising played an important role in knowledge dissemination for 78.9% of the respondents, while 36.0% used some unspecified means.

From demographic cross-tabulations with a park owner's tendency to advertise, it was found: 1) the Pacific, South Atlantic, and Central regions tend to be the most active; and 2) owners of parks developed during the 1970's consistently tend to advertise more than owners of older parks. The only exception to the latter trend came in the case of advertisement through signs in parks developed during the 1960's. Their level of sign advertising was as large, if not larger, than the level used by respondents from parks developed in the 1970's.

Another consistent trend was noted in a cross-tabulation of advertising data with data on total spaces of all parks that the respondent owns. Advertising of all kinds except by word-of-mouth was more commonly conducted by those firms with greater numbers of spaces. Publicity by word-of-mouth did not vary with the number of spaces.

An effort was also made to determine through the cross-tabulation process whether or not advertising was a proxy for product differentiation. This was undertaken by comparing data on the means of advertising with the vacancy rates and the existence or nonexistence of waiting lists. It would be expected that low vacancy rates and a positive response to the question about waiting lists would accompany more sophisticated forms of advertising.

Exactly the opposite result was observed. The firms that tend to fund the most sophisticated and expensive forms of advertising are those experiencing greater difficulties in conducting their business. They tend to have more vacancies and fewer people on their waiting lists.

Causality

It is understandable that the mobile home park system tends to advertise through non-mass media techniques (this excludes radio, television, and newspapers). The system has a multitude of owners and very few have the resources to make use of advertisements on radio or on television. The owners do not feel the need to advertise and are not particularly concerned with the problems of product differentiation. The observed demographic cross-tabulations reflect the trend toward larger parks in certain regions, such as the South Atlantic and the Pacific, at the present time.

The annually published Woodall Mobile Home Park Directory, which analyzed parks nationally according to rentals and quality of services, also tends to limit the need for advertising as well as the potential benefits of product differentiation by limiting the number of consumers who will rely on park advertising as their primary source of information. The Directory's analysis is well accepted throughout the industry and by many of those who would locate their mobile homes in some park. Thus it contributes to the free flow of information throughout the market.

The analysis of the influence of advertising on a firm's success, as a measure of product differentiation, suggests more that failure leads a firm to advertise rather than advertising leads a firm to success. There is definitely a distinction to be made as to which is cause and

which is effect, and that distinction often creates a danger in the testing of an advertising success hypothesis.

Emerging Trends

As has already been indicated, the owners of those parks constructed in the 1970's tend to engage in more mass media advertising (radio, television, newspapers) than their predecessors do. This is a sensible result, insofar as the more modern parks tend to be large enough both geographically and financially to more effectively use mass media techniques. It is anticipated that this trend will continue, but that it will probably be a great deal of time before significant product differentiation is seen within the system, except for such geographic areas as California and Florida where the industry is highly developed. This can be assumed both from the slowness with which the present trends are proceeding -- as indicated by the concentration rate of the park system -- and the additional time that will be required for the development of brand name identification once advertising reaches the proper level.

2.6.3 Summary and Conclusions

There are many barriers to entry in the mobile home park system which are based on the costs of development, land, and obtaining favorable zoning. These costs are highly volatile from area to area, and they may range from the moderate to the infinite. They allow a park owner in many instances to raise the price of the services he supplies due to his exclusive control.

Barriers to entry caused by product differentiation are minimal, though they may be expected to increase gradually over time. Though there are regional exceptions, park owners, for the most part, do not perceive a need nor do they have the resources to carry on advertising through the major communications media -- radio, television, or newspapers. The presence of Woodall's Directory seems to encourage this perception.

As such, advertising does not damage system efficiency by creating favoritisms among consumers for a certain brand of services which then might allow prices to be increased above competitive levels, and which might make it more difficult for competitors to successfully invade the market. As used by park owners, advertising seems to be a very much more defensive than offensive weapon. Poor performance triggers advertising rather than advertising triggering high sales. In total, the barriers to entry of the mobile home park system are relatively high and increasing and may ultimately begin to inhibit competition.

3.
Operation

3.1 EXPECTATIONS BASED ON STRUCTURE

The mobile home park system in America is competitively structured. The distribution of members is extremely atomistic, with the largest firms in the industry controlling less than one percent of the national total of approximately 25,000 parks. Integration is almost entirely restricted to the dealership system, though it is very significant on this level and, for many purposes, makes it practical to consider the dealer-park combination as one operation. Diversification appears significant but very little of it is directed into any one specific area. Diversification into areas providing for substitute goods seems rather limited. All of these structural conditions suggest competition.

On the other hand, there are some significant barriers to entry, particularly the costs of obtaining zoning and the costs of land and development, which would tend to inhibit competition. However, the PMHI Park Survey results indicate that parks offering like services are, in the wide variety of cases, available within a reasonable distance. The question concerning the number of such parks in proximity was not asked in this survey. The greater the number, the less likely that collusion, increasing prices to the consumer, would be able to occur.

Other significant structural conclusions derived in the preceding chapter are as follows: First, that entry barriers due to product differentiation are slight, which encourages competition. Secondly, economies of scale do apply for different aspects of the park system, but their total impact is difficult to measure from our data.

In conclusion, the mobile home park system should behave competitively with only limited and scattered local pockets of market control generated by high entry barriers. Rents will probably be determined by the costs facing the park owner, as opposed to the amount he can extract from the market by contracting supply. Therefore, reasonable profits, based on the characteristics of economic rent, should be observed instead of profits at windfall levels. Prices should be relatively stable over time as bursts of predatory pricing to clear the market of occasional competitors should not be a characteristic of the system. Rents should be quite similar in an area facing similar costs over time, though they should not vary too closely in the short run, as might be expected from an oligopolistic system of tacit price coordination. The influence of the Woodall's guide as a standardizing influence must be considered in this regard. Rents must also be examined in terms of price discrimination implications; there should be little discrimination between consumers based on the consumer's income, life style, age, season of application, or other characteristics in a competitive system. Some of these expectations with regard to price policy are examined under "Price Policy" .

Product policies and other dynamics, which can be expected to develop in a system with generally active internal competition are examined in the balance of this chapter on system operations. Specialization of park services as a means of getting around competition would be expected to develop and those parks which do not go the specialization route would be forced to develop a very standard set of services in order to remain competitive. Lastly, we expect the innovative behavior which often characterizes truly competitive systems.

3.2 PRICE POLICY

3.2.1 Analysis

As Figure 58 indicates, virtually all park revenue derives from park rentals. Of the respondents 74.8% replied that between 81% and 100% of their revenue comes from this source. Furthermore, 54.4% of the sample stated that between 95% and 100% of their income comes from rent. For the entire survey population, a mean percentage of park revenue based on rent of 85.3% was recorded.

Other sources of income are minor, as can be seen in Figure 59. It was found that approximately 2.0% of total revenue comes from sales of lots to home owners, with 95.2% of those owning parks reporting no revenue from this source. Revenue from sales of mobile homes was 6.1% of the total. Though this was the largest secondary source of revenue reported, it still seems small given the extent of park owner diversification into the dealership system. Revenue from mobile home rentals, a highly related area, was 2.7%. Home sales generated no revenue for 83.5%, while 81.7% stated that they received no income from rentals.

REVENUE FROM PARK RENTALS	
% OF TOTAL REVENUE	% OF TOTAL RESPONDENTS
0 - 20	5.8
21 - 40	2.0
41 - 60	5.8
61 - 80	11.6
81 - 85	3.0
86 - 90	10.6
91 - 95	6.8
95 - 99	14.6
100	39.8

Source: PMHI Park Survey

FIGURE 58: REVENUE FROM PARK RENTALS

SOURCE	MEAN % OF TOTAL REVENUE	% OF RESPONDENTS DERIVING NO REVENUE FROM SOURCE
Park Rentals	85.3	1.9
Mobile Home Sales	6.1	83.5
Mobile Home Rentals	2.7	81.7
Lot Sales	2.0	95.2
Overnight Rec. Vehicles	1.7	85.4
Utilities	1.3	88.5
Service Fees	0.3	92.9
Concessions	0.2	88.8
Other	0.5	92.8

Source: PMHI Park Survey

FIGURE 59: SOURCES OF PARK OWNER REVENUE

Some other minor sources of revenue, all considered in the mean, were utilities (1.3%, with 88.5% receiving no funds in this way), service fees (0.3%), concessions (0.2%), and fees from overnight stay of recreational vehicles (1.7%). Of all respondents, 92.9%, 88.8%, and 85.4%, respectively, reported no revenue from the last three sources. A total of 0.5% came from other sources.

There are certain census regions in which the pattern of the predominant contribution of rent to total revenue is altered, but on the whole, the trend is quite stable. Some of the major exceptions to the pattern may be found in the Middle Atlantic, South Atlantic, East South Central, and Pacific areas. On the mean, in the Middle Atlantic, only 56.3% of revenue derives from rent, while 49.0% of their revenue comes from mobile home sales. In the South Atlantic, lot sales are more than thrice the national average standing at 7.4%. East South Central respondents stated that 10.0% of their revenue came from mobile home rentals, almost four times the national average, and that 10.0% came from over-night recreational vehicles which is nearly seven times the national figure.

The PMHI/PS also questioned park owners about charges in addition to continuing rent that they may assess to consumers on a one time only basis. They are few in number and are used in a minor way by park owners. Only 7.0% of the respondents to the survey charge an entrance fee to their customers. The mean entrance fee was \$51.89. Of the owners 27.5% have a requirement for a security deposit, averaging \$47.31. A resale fee

for home owners planning to leave the park is assessed by 11.2% of the respondents to the survey. No information on the average costs charged was available.

There was broad agreement with regard to the policies (entrance fees, security deposits, and resale fees) of owners in different regions. The only skewed results may be observed in isolated cases in the South Atlantic, East North Central, West North Central, and West South Central regions. In the South Atlantic, 13.8% of the parks have an entrance fee which is approximately twice the national average. Security deposits are widely used in the West North Central area (42.9% of the owners require them) and in the West South Central (45.5%). They are also more commonly used in the East North Central region (41.2%). Of that region's park owners 18.8% also have entrance fees.

There were a number of other charges for certain services which could be assessed to home owners and which could be included in rent or in the sale price, if the park owner were selling lots. A detailed effort was made to categorize these services and to determine the contribution of their costs to rents placed upon consumers. Much information has been tabulated about the tendencies of park owners to include or exclude services from the rents they charge, but, due to time constraints, relatively little about their actual contribution to rents prices could be determined.

Data on this variety of services is displayed in Figure 60. As can be seen by the changes in the size of the statistical base for each category, there is remarkable variance. It should also be noted that there were strong differences in the behavior of owners selling lots from those renting them. In the former case, the amenities most often included were the mobile home unit, supports and skirts for the home, an initial hook-up of the home to the facilities, and other unspecified accessories and items.

The most commonly included services in the rentals case seem to be water, sewers, park maintenance, the mobile home and its supports, and other accessories and items. There are also many other services to the home owner included in about one-fifth of the cases, such as gas, electricity, garbage disposal, and taxes. The percentages of these services included in lot sales is understandably much lower due to their continuing nature.

Since almost all park spaces are rented and the predominant source of revenue is rent, it seems reasonable to base a study of prices in the mobile home park system on an analysis of rents. Fortunately, extensive data on rent policy throughout the United States were available through annual rent statistics provided to PMHI by the Woodall Publishing Company. The analysis that follows is based on this data compiled by Woodall in 1974. It is confined to Woodall-rated parks.

ITEM OR SERVICE	# OF RESPONDENTS WHO INCLUDE		# OF RESPONDENTS WHO INCLUDE		# WHO DO NOT	% INCLUDE	# WHO DO NOT	% INCLUDE
	IN SALE	DO NOT	IN RENT	DO NOT				
Initial Hookup to Utilities	97	20	89	28	28	17.1	28	23.9
Lot Maintenance (Private Areas)	109	3	95	17	17	2.7	17	15.2
Mobile Home Unit	6	7	9	4	4	53.8	4	30.8
Mobile Home Supports	7	9	10	6	6	56.3	6	37.5
Mobile Home Skirts	2	9	10	1	1	81.8	1	9.1
Other Accessories	7	7	7	7	7	50.0	7	50.0
Other Items	7	2	4	6	6	22.2	6	60.0
Water	113	11	19	105	105	8.9	105	84.7
Gas (Central System)	110	6	93	23	23	5.2	23	19.8
Sewer (Central System)	110	10	28	92	92	8.3	92	76.7
Electricity	106	7	90	23	23	6.2	23	20.4
Garbage Pickup	110	13	28	95	95	10.6	95	27.2
Taxes	103	7	85	25	25	6.4	25	22.7
Park Maintenance (Community Facilities)	111	6	44	73	73	5.1	73	62.4

Source: PMHI Park Survey

FIGURE 60: SERVICES INCLUDED IN SALE OR RENT

The Woodall's rent data (see Figure 61) is divided into five categories: \$29 or less, \$30-39, \$40-59, \$60-100, and more than \$100 per month. On a national level, very few parks are located at either extremity. Of the parks 5.8% fall in the lowest category, while 1.6% fall in the highest. The data clusters in the \$40-59 range, with some 46.4% of the sample. All in all, the distribution is rather symmetrical.

The data differ strongly from region to region. In New England, 86.3% of the owners charge rents in the \$30 to \$59 range. The South Atlantic region is a less skewed, though still far from average aggregation, with 58.5% of the park owners receiving rents between \$30 and \$39 a month. Several other regions tended to have the preponderance of their rents in the second and third categories. The Pacific region is biased in just the opposite direction; 35.5% of this region's parks charge rents between \$40 and \$100, the third and fourth categories. Five point eight percent charged rents in excess of \$100, a very large number relative to the national total. California alone contained 182 of the 197 parks in the category.

A crude attempt was made to use this data as an indicator of pricing of rents in the mobile home park system. Each of the five rent categories was assigned a consecutive number between one and five. These integers were multiplied by the percentage of parks in that category, summed for each region, and then for the nation as a whole in order to produce a value analogous to a mean value.

REGION	RENT LEVELS										MEAN RENT LEVEL							
	1	2	3	4	5	6	7	8	9	10								
	# Parks	%	\$29 or less	# Parks	%	\$30 - 39	# Parks	%	\$40 - 59	# Parks	%	\$60 - 100	# Parks	%	\$100 +	# Parks	%	
New England	12	3.0	140	35.4	201	50.9	41	10.4	1	0.3								2.696
Middle Atlantic	287	2.7	210	20.2	548	52.6	254	24.4	2	0.2								2.995
South Atlantic	149	5.3	1635	58.5	757	27.1	251	9.0	3	0.1								2.401
East South Central	119	23.4	226	44.4	155	30.6	8	1.6	0	0.0								2.104
West South Central	80	8.5	385	40.7	436	46.1	45	4.8	0	0.0								2.474
East North Central	63	3.2	521	26.1	1107	55.4	305	15.3	3	0.2								2.838
West North Central	190	1.5	463	36.8	527	41.9	76	6.0	1	0.1								2.253
Mountain	54	4.3	305	24.5	595	47.8	285	22.9	5	0.4								2.903
Pacific	22	0.7	250	8.0	1388	44.3	1291	41.2	182	5.8								3.434
United States	715	5.8	3119	25.4	5712	46.4	2558	20.8	197	1.6								2.870

Source: Compiled from statistics provided by the Woodall Publishing Company, 1974

FIGURE 61: RENT LEVELS IN WOODALL-RATED PARKS

These regional values can then be compared with the national value as a measure of differences in prices and perhaps of competition.

For example, in Figure 61, .030 of the parks in New England had rents of \$29 or less. \$29 or less has been assigned the value 1. .030 is multiplied by 1 and then added to .354 multiplied by 2 and to .509 multiplied by 3, etc. This eventually sums to 2.696. By conducting this same process with the statistics available for the entire United States, the value 2.870 is produced. On this basis, it is concluded that rent levels are lower in the New England area than for the country as a whole, and that this may suggest a more competitive than average industry in that region.

This technique crudely implies that the industry is more competitive in some places than in others. Competition is only one of many factors that might influence the rents which are assessed to the consumer. Other factors include the differences in developmental and continuing costs which the park owner faces in each area, the difference in price growth locally, and the differences in quality and variety of services that the park offers. Following the analysis of the rent price levels in different regions, an effort will be made to consider the rate of return (ROR) on equity enjoyed by industry members in different areas, in order to determine the extent to which different rent levels may reflect greater than competitive profits and not merely higher costs and normal profits.

The highest rents in the country are seen in the Pacific region with

a value of 3.434, compared to the national average of 2.870. This is more than likely due to the many parks of high quality located in California. The next highest ratings were the Mountain and Middle Atlantic areas, with 2.903 and 2.995, respectively. Particularly in the latter case, these may well reflect differences in the competitive framework because they are much less the result of the presence of high quality parks. All other regions ranked below the national level with the lowest being the West North Central and East South Central (2.253 and 2.104 respectively).

These values compare favorably with the ROR on equity in most of the regions, based on sparse data from the PMHI/PS. The Middle Atlantic, Mountain, and Pacific regions all had the most parks located in the higher ROR ranges. Smaller values than the national average were seen in the New England and West North Central areas. Only in the South Atlantic and West South Central regions do the rent and profit data diverge. On the basis of this information, one may speculate about the extent of competition in different regions. The least competitive areas, based on price and profits, appear to be the Middle Atlantic, Mountain, and perhaps the Pacific areas. The more competitive park owners may be found in the West North Central, the South Atlantic, and possibly the East South Central sectors.

Overall, the PMHI Park Survey indicates that the average ROR on equity is 16.196%. As Figure 62 indicates, 19.6% of the respondents claimed equity returns of between 0 and 5%. The largest group, 31.4%, stated

RATE OF RETURN ON EQUITY	
% Rate of Return	% of Total Respondents
0 - 5	19.6
6 - 10	31.4
11 - 15	9.8
16 - 20	15.7
21 - 25	7.8
26 - 30	7.9
30 +	7.8

Source: PMHI Park Survey

FIGURE 62: AMOUNT OF RATE OF RETURN ON EQUITY

that their ROR's were between 6 and 10%. Other categories were fairly equally distributed among the population, with the exception of the 16 - 20% level, in which 15.7% of the respondents were located.

3.2.2 Emerging Trends

All efforts to examine trends in price policy were based on the PMHI Park Survey (see Figure 63). There were three areas in which a substantial enough body of data was available to consider trends. These were the percentage breakdown of the revenue received by owners, the existence of additional one time only charges, and the matter of ROR on equity to owners.

As can be observed from this figure, park rentals are making up a declining proportion of revenue over time. For parks begun in the 1950's, rentals account for 91.5% of the revenue, but account for only 82.9% thus far for parks started in the 1970's. The tendency toward lot sales also appears to be decreasing. None of the respondents who had started during the current decade reported any such sales. On the other hand, mobile home rentals, revenue from overnight recreational vehicles, and other unspecified categories all appear to be on the upswing.

Additional charges do not appear to be trending neatly in any direction. Entrance fees stood at 9.1% for respondents whose parks were built during the 1950's, took a dip to 5.3 % for parks started during the 1960's, but have returned to approximately the previous level,

YEAR PARK STARTED	RATE OF RETURN ON EQUITY									
	0 - 5%		5 - 10%		10 - 15%		15 - 20%		20% +	
	TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
1950-9	1	5.9	4	23.2	2	11.8	3	17.6	7	41.2
1960-9	5	27.8	6	33.3	2	11.1	2	11.1	3	16.7
1970-	4	50.0	0	0.0	0	0.0	3	37.5	1	12.5

Source: PMHI Park Survey

FIGURE 63: CROSS-TABULATION OF RATE OF RETURN ON EQUITY WITH PARK AGE

presently standing at 11.5%. Security deposits are coming into more and more use. Of the parks surveyed, 44.4% now require deposits as opposed to only 18.2% of the parks constructed during the 1950's. Resale fees have moved in the opposite direction, increasing 0.4% from the 1950's to the 1960's. Resale fees are used by only 4.8% of the respondents who built their parks during the current decade.

The trend in ROR on equity, visible from the survey data, may be perceived either through Figure 63 or through Figure 64 which graphs the rate of return with the percentage of parks at each equity level for the three relevant decades. Figure 64 shows that ROR on equity distribution throughout the system was relatively similar for parks built in the 1950's and the 1960's, with the 1960's having more firms at lower ROR levels and fewer firms at higher ROR levels than the 1950's. However the 1970's is a very different story with two major concentrations of parks at the 0 to 5% and 15 to 20% levels.

3.2.3 Summary and Conclusions

Nearly all revenue received by park owners derives from park rentals. There are many other amenities or services which the owner may or may not provide within those rentals, but they are of small significance in the development of pricing policy. A comparison of rental rates throughout the country, furthermore, suggests wide variation from a national average. This variance correlates well with

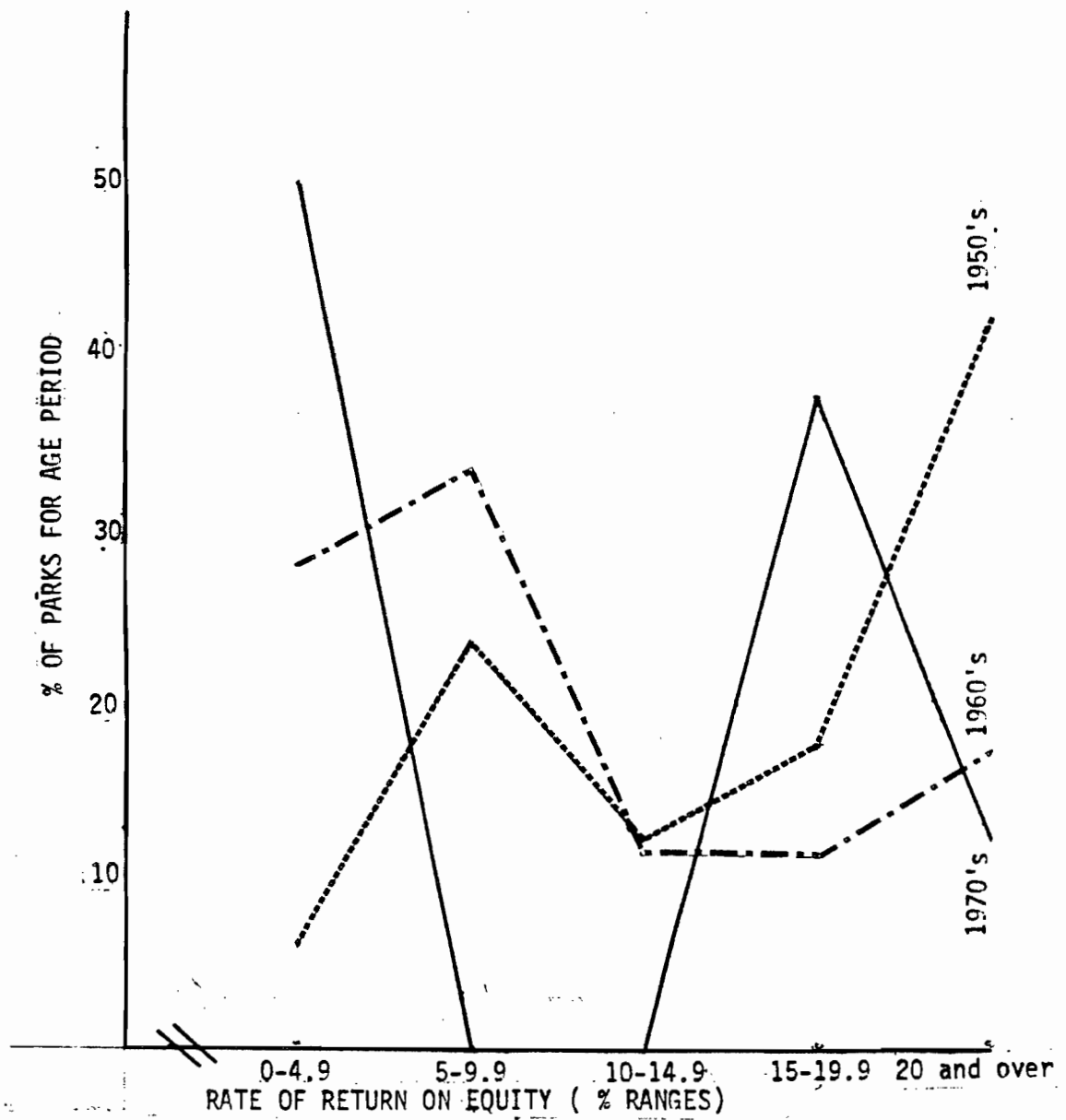


FIGURE 64: RATE OF RETURN ON EQUITY VS. PARK AGE

variance of data on profit rates, leading to the conclusion that the system is more competitive in certain areas than in others.

Price policy in the system is tending toward increasing revenues from sources other than park rentals, though park rentals continue to provide the lion's share of revenue. So far in the 1970's, profit rates are also undergoing changes, a very radical movement toward a bipolar equity return distribution. Such a distribution would be consistent with the hypothesis of two different types of parks in the system, as presented in the diversification chapter. One type is the sophisticated well organized retirement community which earns a high rate of return, and the other type is the "ma and pa" operation, at a lower level of return.

Many other aspects of price policy have not been discussed in this chapter either because of unavailable data or because of data too raw to be properly tabulated in time to contribute to this study. There are also a number of major areas which, for reasons of time constraints, could not be examined in more depth. They now should be enumerated. First, the measure used in the analysis of price policy to measure competition could be much improved. A number of other factors, already mentioned, must be considered and controlled to determine the extent to which differences in rent levels indicate differences in competition. By carefully analyzing the costs incurred, the regional variations in prices and the quality of services, one should be able to produce some sort of properly weighted variable that could be compared regionally.

It might also be productive to approach the problem through regression analysis, introducing the factors mentioned above and a dummy variable representing local competition.

A second problem was the inability of the analysis to determine whether or not, or to what extent, the system is characterized by price discrimination. Very little data exists in this regard, and it would probably be necessary to conduct additional polling to build up some body of information. Such a survey might well be directed toward park tenants rather than park owners. It would have to determine whether or not the owners attempted to charge different rents to different tenants based on their estimation of the tenants ability and willingness to pay.

Another important topic that could not be sufficiently analyzed is whether or not price coordination exists regionally or locally. This could be tested through the Woodall data at the Project's disposal, but it would have to be properly tabulated -- a very time consuming process. Such data could then be used to trace rates of price change over some period of time, say five years, to see how smoothly movement between rental price levels occurred. This would have to be compared with consumer price index increases to see exactly how prices were keeping step with regional levels.

3.3 PRODUCT POLICY

3.3.1 Analysis

In order to properly examine product policies in the mobile home park system, it is first necessary to more carefully define the product which the park owner offers to the consumer. This product is the mobile home space on which the home may be sited, and a wide variety of supporting goods and services, some private and some communal.

The types of services and facilities that a park may provide for its occupants include:

- a. A street system -- paved and curbed
- b. An underground utility system
- c. Automatic laundry or laundromat
- d. Play areas for children and run areas for pets
- e. Recreational facilities, including a swimming pool and/or a recreational program
- f. Competent and helpful management available at all times
- g. Mail delivery
- h. Other facilities and services, such as everyday and casual shopping, religious services, and community-wide gatherings of a social or entertainment nature

The variation of the goods and services supplied by park owners throughout the country was measured through two sources: data supplied by Woodall's Publishing Company and the PMHI Park Survey. The former source is the more comprehensive while the latter was used to examine particular aspects of product policy that could not be analyzed with the data made available by the Woodall's organization.

A Description of the Woodall's Rating System

The Woodall's staff has been rating mobile home parks since 1947. Small teams, usually two persons, carefully inspect the various parks requesting to be listed. Before one is listed, it is systematically examined on a number of points, such as the conditions of the mobile home units present, the degree of planning and upkeep of the park, its services and facilities, the competence of its management, and the character of the occupant clientele. Parks examined are not listed if their quality levels fall below Woodall minimum standards. It is probable that not all parks are or have ever been examined. The Woodall's Directory currently lists only about 13,000 parks of the national total of about 24,500.

Because of the competitive nature of the park system, the likely peer pressure to establish recognition and to prove that one's park is as good as its neighbors' and the value in advertising their presence and quality, it is probable that most parks feel that they should be listed among the top parks and request to be inspected. Therefore, the Woodall's listings are likely to provide an accurate picture of the better

parks in the United States. It should be noted that the Woodall's staff is continuously re-examining previously rated parks and inspecting new ones, so that incentives exist for the maintenance and/or establishment of a high quality product.

The mobile home park rating system, as developed by the Woodall Publishing Company, has undergone a constant process of revision and upgrading in the 26 years it has been published. As the mobile home has outgrown the image of the travel trailer and become more sophisticated and legitimate, so too have the scope and concerns of the Woodall rating system changed. This has been especially true since the advent of the larger, wider single-wide and double-wide units, which have significantly altered the spatial requirements for quality mobile home park developments.

A comparison of the star-rating system in 1968 and 1972 reveals some interesting facts. The Woodall One-star Rating -- the lowest acceptable rating for parks which are at least "a decent place to live" -- changed little over the five year period from 1968 to 1972. The only significant alteration was the elimination of the requirement of "adequate-laundry facilities." This apparent downgrading in the rating may be partially explained by a new exception added in 1972 to the Two-star Rating, i.e. "requirements may be waived in parks where all residents have laundry in home."

The Woodall Two-star Rating, which requires certain extra amenities (e.g. landscaping, storage areas, etc.) in addition to those offered

in a One-star Park, also remained generally the same. With the exception of the above-stated waiver, the only other alterations were the elimination of the requirements for: 1) the availability of 220 volt lines, and 2) the provision of play areas "if the children are accepted." Since families with children tend to be much more common in parks with lower star ratings, the elimination of this requirement is significant.

Woodall Three-star Parks are of significantly higher quality than the One and Two-star Parks, but are not as uniformly outstanding as the higher rated parks. Many of the Three-star Parks may once have been rated higher, but original construction in these parks might prohibit utilization of the newer 12-foot, 14-foot or double-wide width units or the 55-foot and 60-foot and over length units. All modifications in the requirements for Three-star Parks were of a purely structural nature (e.g. changes in porches, cabanas, park signs, etc.). However, it is important to note that in 1972 the following reference to children was eliminated from the introduction to the Three-star section: "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."

The Woodall Four-star and Five-star categories are the luxury park classifications. It is here that the rating system has undergone its most rigorous upgrading since 1968. Consequently, many parks formerly

rated as Four or Five-star often have "slipped" to a Three-star rating. Luxury mobile home parks may be defined primarily by the presence of certain extra features in the physical environment as well as by outstanding upkeep and management. In 1972, some of the ways in which the Four-star Parks were upgraded included the following:

- 1) 75-98% of the homes must be covered with skirting of some kind;
- 2) tanks and bottles must be concealed or eliminated;
- 3) no eight-foot wide homes may be permitted; and
- 4) off-street parking must be provided.

In addition, a new requirement concerning play areas for children was added.

The top Woodall rating is the Five-star Park. As the directory states, "They should be nearly impossible to improve. Their quality must be diligently maintained." These parks must include outstanding recreational facilities (e.g. pool, recreation hall, etc.), carefully planned lay-out (i.e. wide paved streets, sidewalks, setbacks, etc.), only late model homes, and must be at least 75% occupied in order for Woodall "to judge the quality of the residents which indicates the park's ability to maintain Five-star rating between inspections."

Five-star mobile home parks had to meet the following upgraded requirements in 1972:

- 1) there had to be 320 square feet of porch or patio space on all homes (except double wides);
- 2) paved two-car, off-street parking;
- 3) all homes completely skirted with quality skirting;
- 4) awnings or cabanas and carport on all homes;
- 5) uniform sheds at

all homes; and 6) superior on-duty management. In addition, an admonition that "most Five-star Parks were for adults only" was eliminated.

Geographic Variations

Given the rating system as it currently exists, an effort was made to determine differences in the quality of the product -- the mobile home park -- being made available by owners in different regions, and, in some cases, different states. This effort was based on the exact same type of system used in the discussion of price policy in the previous chapter. A mean value star rating for each area was developed (see Figure 65).

As the data indicate, the mean U.S. park star rating in 1973 was 2.18. It is interesting to note that most regions fall below this mean, some very much so. South Atlantic and the East South Central, for instance, stand at 1.59 and 1.78, respectively. The only regions above the national average were New England, which is seldom viewed as a higher than average quality product area, and the Pacific area, which was rated 2.44, much higher than anywhere else in the system. A state by state analysis indicates that California's mean star rating is 2.69, while Florida's is 2.50.

This analysis suggests that the mobile home park product is very different in quality in California and Florida from the rest of the

STATE/REGION	1	2	3	4	5	TOTAL
CONN.	23 (0.31)	28 (0.37)	12 (0.16)	9 (0.12)	3 (0.04)	75
MAINE	22 (0.20)	57 (0.52)	28 (0.25)	3 (0.03)	0 (0.00)	110
MASS.	21 (0.21)	37 (0.37)	35 (0.35)	8 (0.08)	0 (0.00)	101
N.H.	17 (0.20)	36 (0.42)	24 (0.28)	7 (0.08)	1	85
R.I.	4	11	7	0	0	22
VERMONT	3	17	12	0	0	32
NEW ENGLAND (2.22)	90 (0.21)	186 (0.44)	118 (0.28)	27 (0.06)	4 (0.01)	425
N.J.	14	39	56	6	1	
N.Y.	195	188	66	10	0	
PA.	78	226	140	17	2	
MID-ATLANTIC (2.03)	287 (0.28)	453 (0.44)	262 (0.25)	33 (0.03)	3 (0.00)	1038
DELAWARE	13	17	11	1	0	
FLORIDA	275 (0.25)	338 (0.30)	271 (0.24)	138 (0.12)	98 (0.09)	1900 (2.50)
GEORGIA	60	61	24	1	0	
MD.	17	40	18	3	0	
N.C.	121	90	26	1	1	
S.C.	44	38	10	1	0	
VA.	71	55	21	3	0	
W.VA.	18	25	7	1	0	
SOUTH ATLANTIC (1.59)	619 (0.32)	664 (0.35)	388 (0.20)	149 (0.08)	99 (0.05)	1919
ALA.	66	89	35	2	0	
KY.	30	51	20	0	0	
MISS.	42	33	8	0	0	
TENN.	40	47	21	3	0	
EAST SOUTH CENTRAL (1.78)	178 (0.38)	220 (0.47)	65 (0.14)	5 (0.01)	0 (0.00)	468
ARK.	60	31	25	3	0	
LA.	36	56	19	1	0	
OKLA.	52	49	37	4	0	
TEX.	109	149	126	31	2	
WEST SOUTH CENTRAL (2.03)	257 (0.33)	285 (0.36)	207 (0.26)	39 (0.05)	2 (0.00)	790

Source: Computed from data provided by Woodall Publishing Company

FIGURE 65: 1973 PARK QUALITY LEVELS

STATE/REGION	1	2	3	4	5	TOTAL
ILL.	126	137	88	16	1	
IND.	70	143	132	19	0	
MICH.	82	177	144	49	0	
OHIO	116	197	169	29	0	
WISC.	71	82	43	7	1	
EAST NORTH CENTRAL (2.16)	465 (0.24)	736 (0.39)	576 (0.30)	120 (0.06)	2 (0.00)	1899
IOWA	60	115	66	14	0	
KANSAS	42	52	38	1	0	
MINN.	76	90	47	12	0	
MO.	100	138	78	15	0	
NEBR.	53	52	22	6	0	
N.D.	24	23	14	1	0	
S.D.	12	15	1	0	0	
WEST NORTH CENTRAL (2.00)	367 (0.31)	485 (0.42)	266 (0.23)	49 (0.04)	0 (0.00)	1167
ARIZ.	171	121	74	27	5	
COLO.	28	39	45	14	1	
IDAHO	77	77	33	5	0	
MONT.	74	49	13	2	1	
NEV.	48	42	27	15	2	
NEW MEX.	31	23	12	2	1	
UTAH	19	35	15	1	1	
WYO.	13	13	1	0	0	
MOUNTAIN (1.93)	461 (0.40)	399 (0.34)	220 (0.19)	66 (0.06)	11 (0.01)	1157
ALASKA	31	24	7	1	0	
CALIFORNIA	391 (0.21)	474 (0.25)	551 (0.29)	357 (0.19)	127 (0.07)	1900 (2.69)
OREGON	114	154	116	34	10	
WASH.	168	199	113	29	6	
PACIFIC (2.44)	704 (0.24)	851 (0.29)	787 (0.27)	421 (0.14)	143 (0.05)	2906
U.S. (2.18)	(0.29)	(0.36)	(0.25)	(0.08)	(0.02)	11788

Source: Computed from data provided by Woodall Publishing Company

FIGURE 65 : 1973 PARK QUALITY LEVELS
(cont.)

country. In the rest of the nation, regional analysis indicates broad similarities, with the exception of the South Atlantic which offers a lower quality product, Florida excepted. There may be at least three different types of product markets at work in the country with differential sets of policies being used by owners.

There is also close correlation between the ratings and the size of the parks (in terms of the number of units present). As one progresses upward from the average One-star Park to the average Five-star Park, the number of units present increases. This correlation is likely because the expenses for the installation of the various services required for a Five-star rating inevitably necessitate a money pool that can be provided only by a larger park. Economies of scale seem to play a significant role.

Services Not Included in Woodall's Ratings

As was already mentioned, certain aspects of product policy which were not included in the Woodall's star rating system were examined through the PMHI Park Survey. There was a variety of services involved based on the availability of community facilities. It was found, for example, that only 2% of parks have shopping or religious facilities, while a sizeable percentage maintain recreational, sports, or other communal facilities. In all cases, however, facilities outside the park are much more widely used than those within the park (see Figure 66).

	PARK HAS	USE PARK'S	USE COMMUNITY'S
Shopping	2.1	0.0	82.1
Other Shopping	2.1	0.0	78.1
Religious	2.1	1.0	79.2
Recreational	36.1	22.7	48.5
Sports	28.4	20.0	64.2
Other	24.5	14.7	27.4

Figures in percentages

Source: PMHI Park Survey

FIGURE 66: COMMUNITY SERVICES OFFERED BY THE PARK

Low percentages of parks making communal facilities available does not mean that park owners are unresponsive to their tenants' desires. It is clear from the data that the overwhelming majority of tenants perceive services located outside their park to be better than those inside the park, with the possible exception of athletic activities, and that the owners perceive that they cannot match the quality of outside facilities and design their product accordingly. These statistics would suggest that the mobile home park system is a competitive one in which owners cannot afford to establish facilities which will by and large not be favored by the tenant. There is some indication of owner responsiveness here.

Practices such as entrance fees, security deposits, and resale fees have already been discussed. Other practices which should be considered as elements of product policy are leasing agreements, restrictive entry practices, and influence by the tenant in park decisions.

Thirty-seven percent of the respondents require a lease. That figure reflects a preponderance of verbal agreements in the South Atlantic, meaning that the actual percentage of iron-clad agreements arrived at is much higher. Of those parks in which a lease is required, 19.0% specify a one month agreement, 51.0% between one month and one year, 25.6% one year, and 20.5% have no set length.

It is difficult to draw conclusions about owner responsiveness to consumer demand on the basis of this information. The requirement of a lease, and its length, will mean very different things to owner and tenant, depending on the type of park. In a young adult park, it may be presumed that tenants would prefer a shorter lease, giving them more flexibility. In a retirement park, however, older tenants are likely to want the stability of a long term lease. The only conclusion that can be drawn is that a movement of leasing arrangements from verbal to written form would be favorable as a matter of sound business practice.

PMHI/PS data also indicate that mobile home parks tend to have a limited mix in terms of their ethnic, professional, or social populations. While, in many cases, this may be the result of restrictive entry practices, no such conclusion can be drawn from the PMHI Park Survey (see Figures 67 and 68). It should be noted in this context that 17.7% of park owners restrict entry to new units. This should be viewed as an attempt to maintain the quality of the park rather than a "restrictive" practice. Even if the tenant mix should be the result of restrictive practices, it is altogether likely that such practices are very responsive to the wishes of tenants--that is, that there is a widespread desire to restrict certain population elements in the community. Such practices may well be due to the competitive needs of the park owner to design the kind of community that the tenant wants or that he perceives him to want.

"Have you ever had these groups in your park?"

White	99.1%
Spanish-American	31.3%
Indian	21.4%
Black	17.9%
Oriental	30.4%
Other	8.0%

Source: PMHI Park Survey

FIGURE 67: RACIAL AND ETHNIC PARK TENANT MIX

"Do you view these groups as potential occupants?"

Older	94.0%
Young Couples	75.0%
Widowed	50.0%
Couples with children	46.6%
Single men	39.0%
Single women	36.4%
Divorcees	31.4%
Students	26.0%
Persons with pets	24.6%
Others	10.2%

Source: PMHI Park Survey

FIGURE 68: SOCIAL AND PROFESSIONAL PARK TENANT MIX

Owners do not tend, as a matter of policy, to buy homes back from their tenants when they leave. Of the respondents, 54.1% never purchase homes back from their tenants when they leave, 28.8% do so rarely, 15.3% do so occasionally, and only 1.8% do so most of the time. This information suggests that park owners are responsive to their tenants but that the actual power exerted by the tenants over the owner is very limited.

This is confirmed by data on the influence that tenants enjoy over the decision-making process of the park. Of the respondents, 48.9% allow tenants to participate in deciding park activities, 26.6% allow tenant influence over new facilities, and 9.9% allow participation in expansion decisions. There would seem to be the level of responsiveness to tenants that a competitive framework would require, but also a clear delineation of the right of management to make those decisions which determine the future of the park financially.

Standardization

Of the respondents to the PMHI Park Survey, 95.0% stated that other parks are located within a 10 mile radius. Such a competitive framework would suggest the development of product standardization within given states or regions, which would then serve to differentiate and specialize that region in terms of the entire nation.

Regarding standardization, 81.2% of the park owners stated that parks located nearby had similar orientations. This standardization of the parks throughout the system has been primarily fostered by the presence of the Woodall's rating method. Since 1947, when the Woodall organization initiated its service, their listings and evaluation process have served as a guideline for park development and operation. The parks, in seeking to achieve and maintain a particular rating level, have necessarily accepted the quality requirements set forth as guides for the evaluation process. Thus, the extent of standardization is strongly indicated by the number of parks subscribing to the Woodall's rating and by the number of parks at each rating level.

It should be remembered that the bases for rating the parks have been upgraded since the inception of the Woodall's Directory. This improvement of standards over time has resulted jointly from the Woodall organization raising its standards to match the improvement of various parks and the Woodall organization causing better development and operation of new parks and the upgrading of older parks.

Because of its continued presence and recognition, the Woodall organization also wields the power to foster policy changes within the system. They do not directly initiate policy changes. Rather, the Woodall organization can strongly influence practices in the system by setting standards which are assiduously followed by many parks.

Aside from the Woodall's Directory, two other factors have also contributed to the competition which has standardized park services: 1) advances in the technologies employed by the park system and their wider availability and easier accessibility and 2) an increased level of sophistication by newer owners of parks.

3.3.2 Emerging Trends

As can be seen from a comparison of Figures 69 and 65, the quality of mobile home parks has increased in the five year period from 1968 to 1973. During this period, the mean star rating for the total United States increased from 2.07 to 2.18, some 5.3%. However, regional variations were much stronger. The largest increase was in the central part of the country: the East South Central's rating jumped 13.4%, the West South Central went up by 14.7%, the East North Central increased 11.3%, and the West North Central's growth was 14.9%. The next highest increase was New England's 6.7%, followed by slight changes in the Mountain and Pacific areas, which increased 2.1% and 1.7% respectively. Declines were experienced along the east coast, with the Mid-Atlantic quality rating going down 2.4% and the South Atlantic 20.5%.

Considering the states individually, California only increased in quality rating by 3.1%, while Florida went up by a hefty 12.6%. Given Florida's growth, the decline in the rest of the South Atlantic must have been very severe.

STATE/REGION	1	2	3	4	5	TOTAL
CONN.	18	22	23	15	1	
MAINE	74	17	8	0	0	
MASS.	23	39	35	7	1	
N.H.	16	27	23	5	2	
R.I.	8	11	5	3	0	
VT.	9	18	8	2	0	
NEW ENGLAND (2.08)	148 (0.35)	134 (0.32)	102 (0.24)	32 (0.08)	4 (0.01)	420
N.J.	13	23	57	32	1	
N.Y.	141	201	72	15	1	
PA.	152	160	78	18	1	
MIDATLANTIC (2.05)	302 (0.31)	384 (0.40)	207 (0.22)	65 (0.07)	3 (0.00)	961
DELA.	4	11	16	5	1	
FLA.	363 (0.31)	400 (0.35)	223 (0.19)	123 (0.11)	49 (0.04)	1158 (2.22)
GA.	88	31	9	1	0	
MD.	14	17	27	15	1	
N.C.	109	60	19	0	1	
S.C.	59	17	4	1	0	
VA.	85	40	11	0	0	
W.VA.	16	3	1	0	0	
SOUTH ATLANTIC (2.00)	738 (0.41)	579 (0.32)	307 (0.17)	145 (0.08)	52 (0.03)	1821
ALA.	82	48	16	1	0	
KY.	25	22	4	0	0	
MISS.	64	39	10	0	0	
TENN.	22	24	6	0	0	
EAST SOUTH CENTRAL (1.57)	193 (0.53)	133 (0.37)	36 (0.10)	1 (0.00)	0 (0.00)	363
ARK.	59	33	22	4	0	
LA.	57	25	22	7	0	
OKLA.	64	32	16	0	0	
TEX.	140	100	56	14	1	
WEST SOUTH CENTRAL (1.77)	320 (0.49)	190 (0.29)	116 (0.18)	25 (0.04)	1 (0.00)	652

Source: Computed from data provided by Woodall Publishing Company

FIGURE 69: 1969 PARK QUALITY LEVELS
(FOR COMPARISON WITH FIG. 65: 1973 LEVELS)

STATE/REGION	1	2	3	4	5	TOTAL
ILL.	175	115	53	12	3	
IND.	119	117	82	7	0	
MICH.	102	121	97	26	1	
OHIO	151	165	114	34	1	
WISC.	94	71	24	4	1	
EAST NORTH CENTRAL (1.94)	641 (0.38)	589 (0.35)	370 (0.22)	83 (0.05)	6 (0.00)	1689
IOWA	136	64	37	8	1	
KANSAS	79	33	13	1	0	
MINN.	97	61	48	12	0	
MO.	77	70	37	8	0	
NEBR.	62	41	23	5	0	
N.D.	27	11	5	1	0	
S.D.	34	32	4	4	0	
WEST NORTH CENTRAL (1.74)	512 (0.50)	312 (0.30)	167 (0.16)	39 (0.04)	1 (0.00)	1031
ARIZ.	146	131	75	60	9	
COLO.	105	53	22	31	3	
IDAHO	99	48	16	1	1	
MONT.	108	25	4	3	1	
NEV.	62	38	20	7	1	
N.M.	50	28	20	11	2	
UTAH	37	20	12	14	0	
WYO.	22	17	10	0	0	
MOUNTAIN (1.89)	629 (0.48)	360 (0.27)	179 (0.14)	127 (0.10)	17 (0.01)	1312
ALASKA	82	48	16	1	0	
CAL.	404 (0.22)	522 (0.28)	474 (0.25)	322 (0.17)	153 (0.08)	1875 (2.61)
ORE.	169	105	45	23	9	
WASH.	193	122	71	7	12	
PACIFIC (2.40)	848 (0.32)	687 (0.26)	606 (0.23)	353 (0.13)	174 (0.07)	2668
U.S. (2.07)	4309 (0.39)	3451 (0.31)	2089 (0.19)	872 (0.08)	258 (0.02)	10979

Source: Computed from data provided by Woodall Publishing Company

FIGURE 69 : 1969 PARK QUALITY LEVELS
(cont.) (FOR COMPARISON WITH FIG. 65: 1973 LEVELS)

The overall trend, then, would seem to be one of rapid growth in the center of the country and Florida, a tremendous decline in the other South Atlantic states, and a relatively static situation everywhere else. This trend must be judged in the light of the changes in Woodall's ratings which have occurred during the period in question -- given the decreased quality implied by the lower star ratings and the increased quality of the higher star ratings, the changes observed in each direction are probably even more substantial.

3.3.3 Summary and Conclusions

The product policies of the mobile home park system are those of a highly competitive system. This is largely due to the Woodall's Mobile Home Park Directory, which has caused a much greater product information flow throughout the system. There has been considerable differentiation of the product from region to region as each area has undergone its own standardization process.

Park owners seem generally responsive to the wishes of their tenants with regard to maintaining certain types of communities. They have allowed a reasonable level of input from tenants in the decision-making process, while retaining their control over the financial affairs of the system. Furthermore, they have generally upgraded the quality of their product, as measured through the star rating system from 1968 to 1973.

It is worth reemphasizing that these trends are in no way uniform on the national level, but vary markedly from region to region. On the basis of the available information, it would appear that the highest quality product can be found in California and Florida, but that the central region of the country is making rapid gains.

4.
Performance

Relying on private initiative alone, the mobile home industry has developed from scratch an entirely new, separate industry-- the mobile home park industry. This is a crucially important supporting industry because it is the very market without which the production system could not have survived and prospered.

The history of the mobile home park system dates back to the immediate post-war period. All over the country, people had taken to the trailer coach for primary, year-round living even though the trailer coach had been intended as secondary housing. The industry suddenly found itself in the housing "business" and the demand for its product, the mobile home, developed beyond expectations. While productive capacity was readily stepped up to keep pace with rising demand, the industry quickly realized that it could not satisfy this demand effectively. Now that its product was used as a home, the industry realized that it produced only one "part" of this home; it did not provide the other indispensable "parts" -- the land upon which to place the home and the community into which to integrate its inhabitants.

Apart from largely substandard trailer camps and poorly maintained private lots, nobody had developed land for the industry's product. Even worse, whatever initiative in this direction did exist was discouraged if not terminated. Due to the prevailing

highly negative "trailer" image, local government officials employed regulatory measures to prevent land from being made available for mobile homes. Examples of these tactics included exclusionary zoning practices or the imposition of local building codes which the mobile home, by definition, could not meet. The industry was left with the sobering realization that without an adequate supply of land, it had no effective market, and that public opinion and the regulatory climate seemed to make the creation of this market impossible.

The industry's reaction demonstrates an unusual degree of farsightedness. In the middle to late 1940's, the Trailer Coach Manufacturers Association (TCMA), the predecessor of the MHMA, embarked on a major effort to build a new, national industry that could provide a sufficient supply of the needed land and new communities.

The effort proceeded on many fronts. The TCMA developed engineering and planning standards for mobile home parks. It also launched an intensive campaign to overcome prejudice on the part of local government and the financial sector, since the TCMA realized that it was crucial to develop more favorable land use control attitudes and greater willingness to finance the development of parks. Finally, the TCMA directed a general, sustained effort toward overcoming the negative attitudes of the population at large. The continuous upgrading of the quality of park developments was an equally important objective

in this effort. Here, the Woodall's organization worked in the same direction and deserves major credit for the emergence of today's high-quality mobile home park:

From the late 1940's to the 1970's, the development of the park system remained one of the highest priority areas of the MHMA. In the early 1970's, the MHMA had become the world's largest residential land developer, with its in-house staff providing design, financing, and other assistance in the development of more than 100,000 park sites per year. The MHMA then decided to discontinue the massive efforts of its land development division and to leave this function to the private sector. By the time this took place, a rapidly growing national industry, the mobile home park industry, had been created.

The creation of this new, crucially important supporting industry is one of the most impressive achievements that any trade association can claim. Without this sustained effort at building its own market, the mobile home industry probably would not exist today.

The implications of this achievement are far-reaching. Many advocates of "industrialization of building" have maintained for some time that public initiative in aggregating a high and stable demand volume for industrialized shelter is the imperative prerequisite for successful building industrialization. This notion, which originated in European countries with highly centralized government structures,

has also been advocated for many years as the panacea in the U.S. While the reliance on the government as a nation's major "houser" should be questioned in almost any economy, it is certainly an unrealistic proposition in this country, which has such a long and strong history of private enterprise. The mobile home industry is by far the most successful paradigm of the "industrialization of building" in all countries with market economies. In fact, it probably can be considered the most successful example in the world. This industry and the park industry that it built have been created by exclusive reliance on private initiative. This fact should stimulate the thinking of individuals in any country who are concerned with or involved in the development of the building industry.

C.

POTENTIALS

A number of potentials for performance improvement exist in the park system, and these are eminently achievable. As noted previously, the park system is a young industry with only a short history; few constraints to growth have developed within the system itself. Instead, most inhibitions to further development result from external factors, notably from land use controls. The system must increase its efforts at overcoming these external forces.

The goals in this discussion are to indicate how the system can continue to grow and mature. One opportunity is especially evident -- extending the system's presence and allowing it to acquire a greater share of the housing market by increasing its responsiveness to the needs of the consumer. In the early years of park development (i.e. the 1930's and 1940's), many of the parks resembled ghettos and were treated as such by the occupants and the communities surrounding the parks. The parks of that period were developed with little planning and operators paid little attention to tenant needs beyond simply providing unit sites. Now the system is developing environments which begin to feature many of the same attributes of the usual suburban community. The park system, however, can move beyond that. It can offer the housing industry a unique opportunity to explore innovations in community development and housing services that would normally be inhibited by long-established and constraining practices within the conventional home building industry. The park system has the potential to pursue such innovations because it is not bound by the many regulations directing the conventional housing industry.

Perhaps the most important advantage is that the park system and the

mobile home industry already treat housing as a total service. The prospective unit owner is able to purchase a dwelling unit from a dealer who is often a park operator. The occupant may then secure a place in the dealer/park-owner park, which may have all the supplementary services of shopping, recreational facilities, religious facilities, and established social programs. It is entirely possible that the occupant will find a relatively homogeneous community into which he/she may be immediately accepted. Nowhere else in the housing sector is such an opportunity for further experimentation with the "housing-as-a-comprehensive-service" concept even approximated.

In the following list, a number of other opportunities will be noted which, if followed, may allow the park system to expand further and reinforce its strengths.

Reinforcing Professionalism in the System

The park system has reached a stage in its growth where a shortage of professional talent is beginning to develop. Three opportunities should be explored or created: 1) improved and more widely accessible methods for training and/or educating prospective developers, owners, or managers to better allow them to start up and operate the park; 2) an increase in consulting services for developers or owners who wish to obtain assistance during start up and initial operation (a case in point is the Woodall organization which has recently begun to

establish such services); and 3) knowledgeable groups or individuals should be encouraged to enter the park system as both developers and owners. A key question is: what kind of encouragement is appropriate and are there specific incentives for attracting qualified individuals or groups? Part of the solution may be to make the potential investor more aware of opportunities in the park system.

Encouraging Greater Economic Concentration

The continued growth and further creation of large multiple park ownerships offer the development of greater expertise within the park system. These organizations quickly generate understandings of the development and operation procedures and create high quality parks which are stable elements within the system. They also offer the possibility of generating some degree of concentration for securing more favorable treatment in the market place. (For example, they may be able to locate and obtain more money for purchasing or developing parks or for developing know-how for arranging land acquisition and code variances.) Multiple park ownership by firms with relatively sophisticated financial techniques should also be encouraged.

Developing Strength in the Park System by Establishing Integration and Diversification

If economic concentration can be increased, and if it increases equally

throughout the system, integration and diversification will naturally increase. A greater integration of activities provides two primary opportunities for evolving a more efficient park system. First, more vertical integration can be created by manufacturers or manufacturer-dealers who enter the system as developers or owners; presumably such people will have a greater level of insight and background relevant to the mobile home industry. Such integration would also appear to offer opportunities for establishing better ties between the various members of industry and for providing a streamlined process of the supply of unit, site, and services. Second, vertical integration, like diversification, may provide a means of protecting the participant against financial difficulties.

Building an Accurate Public Image of the System

By employing more sophisticated and pervasive advertising methods, the park system should be better able to display its product and foster growth. Advertising the nature of the park system's product is as important as stressing the range and quality of services offered by the system. In order to overcome the image fostered primarily by the old trailer camps of the 1930's and the 1940's, the park system must inform the public of its new character. To promote more widespread acceptance, the park system should communicate its ability to provide a total housing service, including dwelling unit, land, maintenance, community, and community services. Such advertising should be based

on existing demographic data (e.g. census information or specifically commissioned studies) to ascertain who would be most receptive to the park system's product and what methods of advertising would be most rewarding. It should be noted that well-employed advertising will help to fill existing park spaces and create a demand for new parks and spaces.

Discouraging Sub-Standard Operations

Strong incentives should be created to encourage park owners and/or managers of sub-standard parks to upgrade their parks. For example, the Woodall organization could be commissioned to develop incentives designed to encourage more park operators to request inspection. In extending its service, the Woodall organization would require financial assistance of some private or public agency such as the MIMA or the Small Business Administration. Such assistance would make Woodall amenable to reflect input from the mobile home industry at large and/or from the public sector in its rating criteria. The purpose of inspecting presently sub-standard parks would be to provide the park owners and/or managers with insights into the deficiencies of their parks and methods of improvement. Possible incentives might include the ease of acquiring capital for such improvements, the establishment of higher rents (without eliminating existing tenants) resulting in potentially greater profits, peer pressure from nearby parks, and increased rental of existing or newly-developed spaces.

Continuing a Reliance on Private Initiative

In its further development, the park system should continue to rely on its own initiative. Its proud historical record, the successful building of a new industry, the park system, by private enterprise, should not be forgotten. Government action should focus on making growth and maturation easier for the industry while allowing the industry to grow independently.

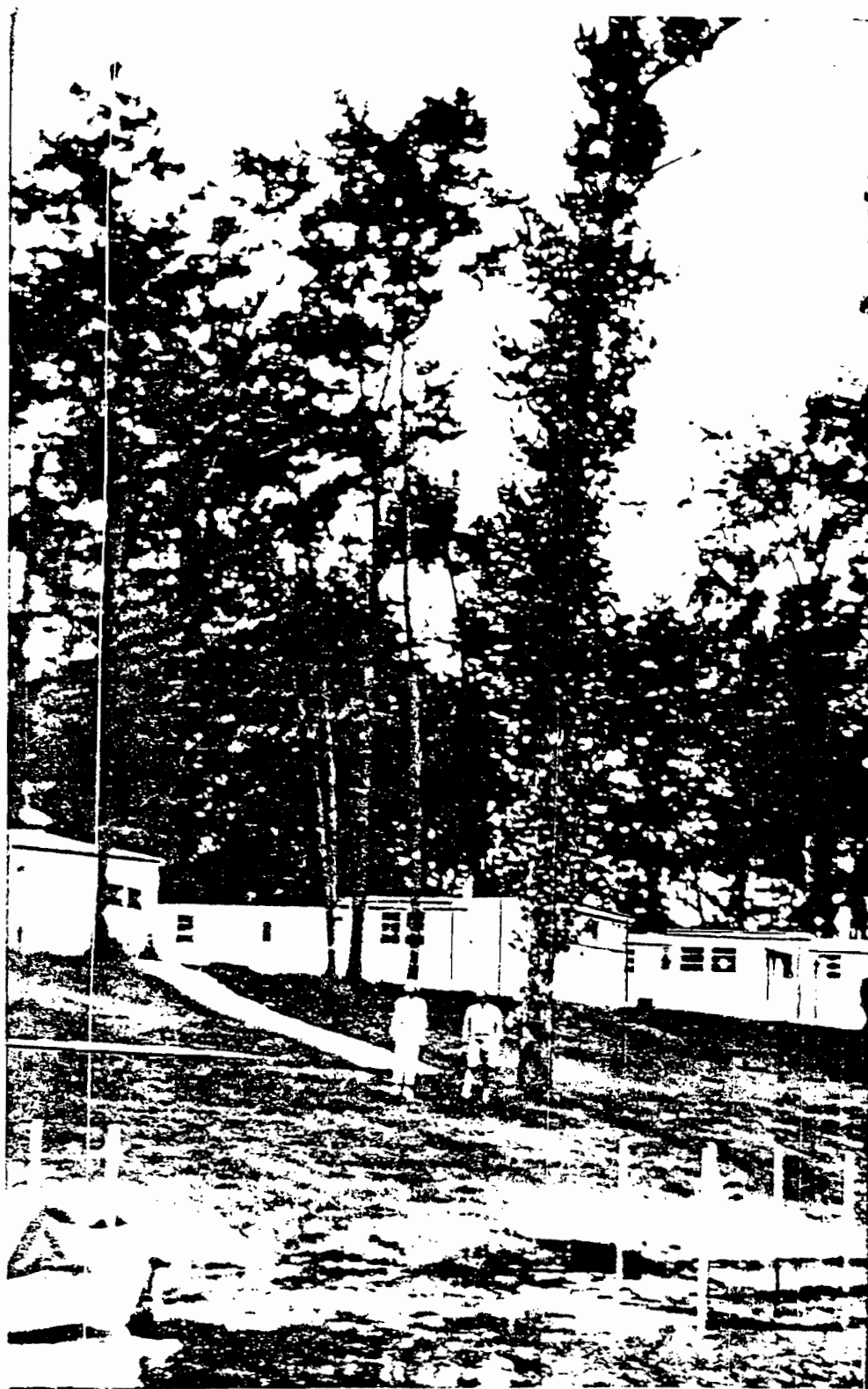


Photo: MHMA

FIGURE 70 : MOBILE HOME COMMUNITIES TODAY

D.

SUMMARY

The mobile home park system has developed along two generally separate tracks. The original development included the old trailer camps and early parks that were established predominately in the 1930's and 1940's. These camps or parks were often small, loosely structured and maintained, and lacked the facilities and services common to the newer parks. They are often described as "ma and pa" parks, governed by husband-and-wife teams and operated according to a variety of practices. As such, these camps or early parks have not served as the progenitors of more recently developed parks. A new phase, begun after World War II, developed parks that are a model for today's parks which are designed and operated as communities.

This second period was initiated largely by the Mobile Home Manufacturers Association (MHMA) which aimed to create an indispensable, supporting industry--the park system--to serve as a companion to the production and distribution systems. The MHMA acted to offer the mobile home unit purchaser a place to locate his dwelling; that is, to build a market for mobile home units. For a number of years in the 1960's and early 1970's, the MHMA was the largest residential land developer in the world, assisting in planning, financing, and constructing more than 100,000 park spaces annually. Recently, the MHMA decided to discontinue the massive efforts of its land development division and to leave this function to the many specialized planning and engineering firms and qualified developers that have emerged along with the development of this new industry.

The creation of this new, crucially important supporting industry by exclusive reliance on private initiative must be considered an outstanding

and truly impressive achievement. Without this sustained effort at building its own market, the mobile home industry probably would not exist today. The lesson is clear and the policy implications are far-reaching; successful innovation in housing production and delivery does not necessarily depend on government initiative. The building of the park system attests to the resourcefulness and capability of the private sector.

New parks are generally built to high design standards and typically provide a wide range of occupant services and facilities. For the approximately 24,500 parks that exist nationally, a rating system has been evolved by the Woodall Publishing Company. In 1974, 13,059 parks were deemed to be of sufficient quality to justify their listing according to Woodall's standards. A large majority of these parks have been developed since World War II.

The majority of the park owners and developers have entered their respective occupations without prior relevant experience. However, small but significant percentages of owners and developers have entered the park system from the conventional building industry. The park system and the mobile home industry have both begun and evolved apart from the conventional building and housing industries. Thus, the infusion of knowledge and experience by such people entering from these industries with a long tradition in land development may offer the park system insights that will be useful for its future growth.

The park system, in particular, and the mobile home industry in general offer a product that is unique among housing producers -- housing as a total service. Because many operators in the park system also sell mobile home units and because the parks frequently offer extensive recreational, social, and cultural services and facilities, the purchaser of a unit is able to acquire housing as well as to secure continuous and often comprehensive services.

But the park system has a number of structural and organizational inadequacies that limit its opportunities for growth. First, the system is largely atomistic, consisting of many small businesses operating singly with only limited access to capital. Many current parks, though displaying considerably greater sophistication than the old "ma and pa" parks, are still run independently by husband-and-wife teams who operate them as an investment and for a livelihood. The economic concentration in the park system is insignificant. A relatively few large multiple park ownerships participate in the system, but these chains generally own no more than 30 to 40 parks. Only one organization controls as many as 100 parks.

Secondly, the park system displays only limited evidence of vertical integration. Existing integration is confined largely to park owners who establish small dealerships to provide units for prospective tenants wishing to enter the specific park. Such linking of park owners with supporting dealerships appears to occur more frequently with the small to medium sized parks and does not seem to relate closely to profitability. It also appears that few park owners gain more

than a minimal share of their income from mobile home unit sales. Similarly, the extent of economic diversification in the system is limited in scope. Most park owners appear to have created few opportunities in other fields that would offer protection from any potential park-related financial difficulties.

Economies of scale in park development and operation do exist. Average costs per park space (i.e. the cost of constructing and operating a park) fall as the size of the park increases, but the optimal park size has not been established. These economies of scale could act as barriers to entering the park system.

There are two other distinct barriers to entering the park system. First, three absolute cost barriers influence the process of start-up -- land costs, development costs, and the costs associated with obtaining favorable zoning. Of the three cost barriers, the first two (land purchase and development of parks and facilities) are currently substantial and are increasing in amount. The third cost (gaining favorable zoning) can act as an infinite barrier for development if suitable accommodations cannot be arranged. Such an infinite barrier impedes development and restricts competition. Second, entry barriers resulting from product differentiation in the system are low. The use of formal advertising methods, which are the most prevalent means for establishing product differentiation, appears to be employed primarily by parks which are sustaining poor performance.

A number of opportunities for creating positive change within the park system have been noted in this section. Of these, the most important would appear to be the following: 1) People and organizations with experience and know-how from related industries should be encouraged to enter the park system as owners and developers, thus continuing the infusion of new ideas and capital into the park system. 2) Greater economic concentration in the system is desirable. If concentration can be increased equally throughout the park system, then integration and diversification patterns more conducive to further development of the system will naturally begin to occur. 3) Means must be found to overcome zoning laws that frequently create insurmountable entry barriers by making further park development impossible in areas where demand for park spaces exists. 4) The park system must find means for improving its image in the public's eye. It can ill afford the widespread public misconception that the park system provides second-class living accommodations for below-average income groups. Instead, the park system should broadcast the unique opportunity it provides its occupants, that of housing as a total service. The park system should also show itself as an industry, made up of many elements, but still linked in its ability to meet the consumers' needs for housing, related services and facilities, and viable communities.

Each of these opportunities should be pursued while recognizing that the mobile home park system, because of its lack of internal restraints, offers a unique setting for fostering experimentation and innovation in housing, community, and related services.

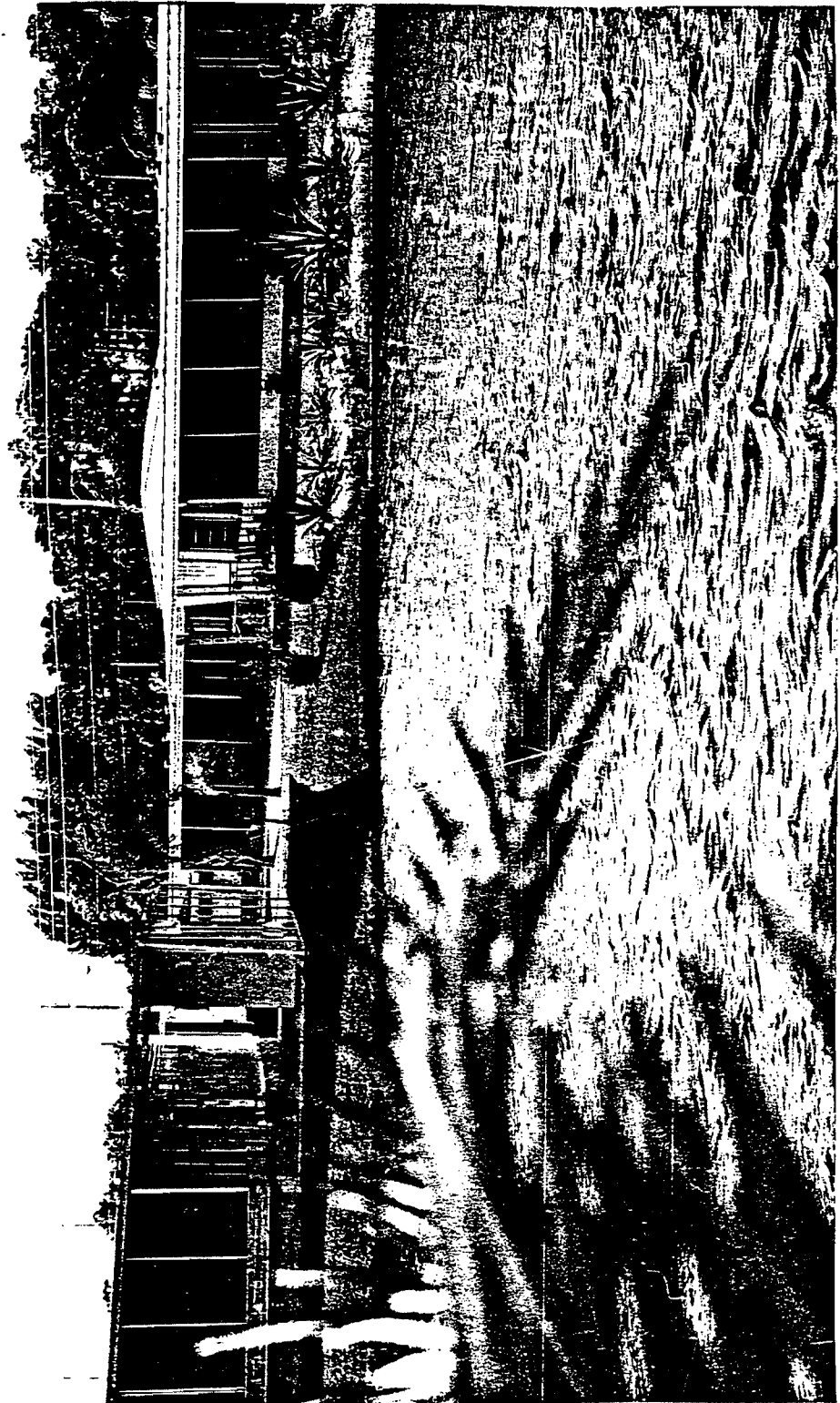


Photo: Arthur Bernhardt

FIGURE 71 : MOBILE HOME COMMUNITIES TODAY

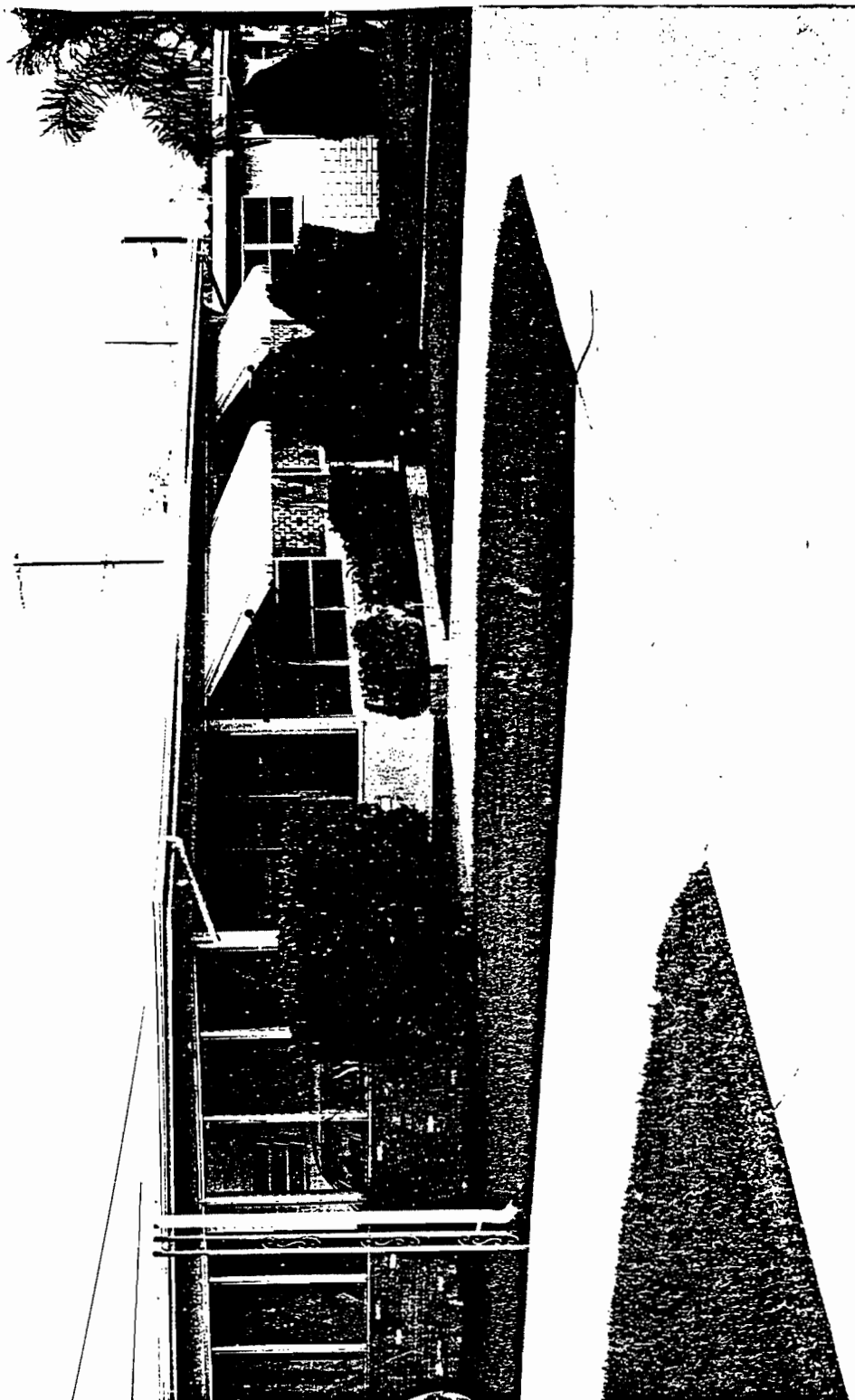


Photo: Arthur Bernhardt

FIGURE 72 : MOBILE HOME COMMUNITIES TODAY



Photo: Arthur Bernhardt

FIGURE 73 : MOBILE HOME COMMUNITIES TODAY

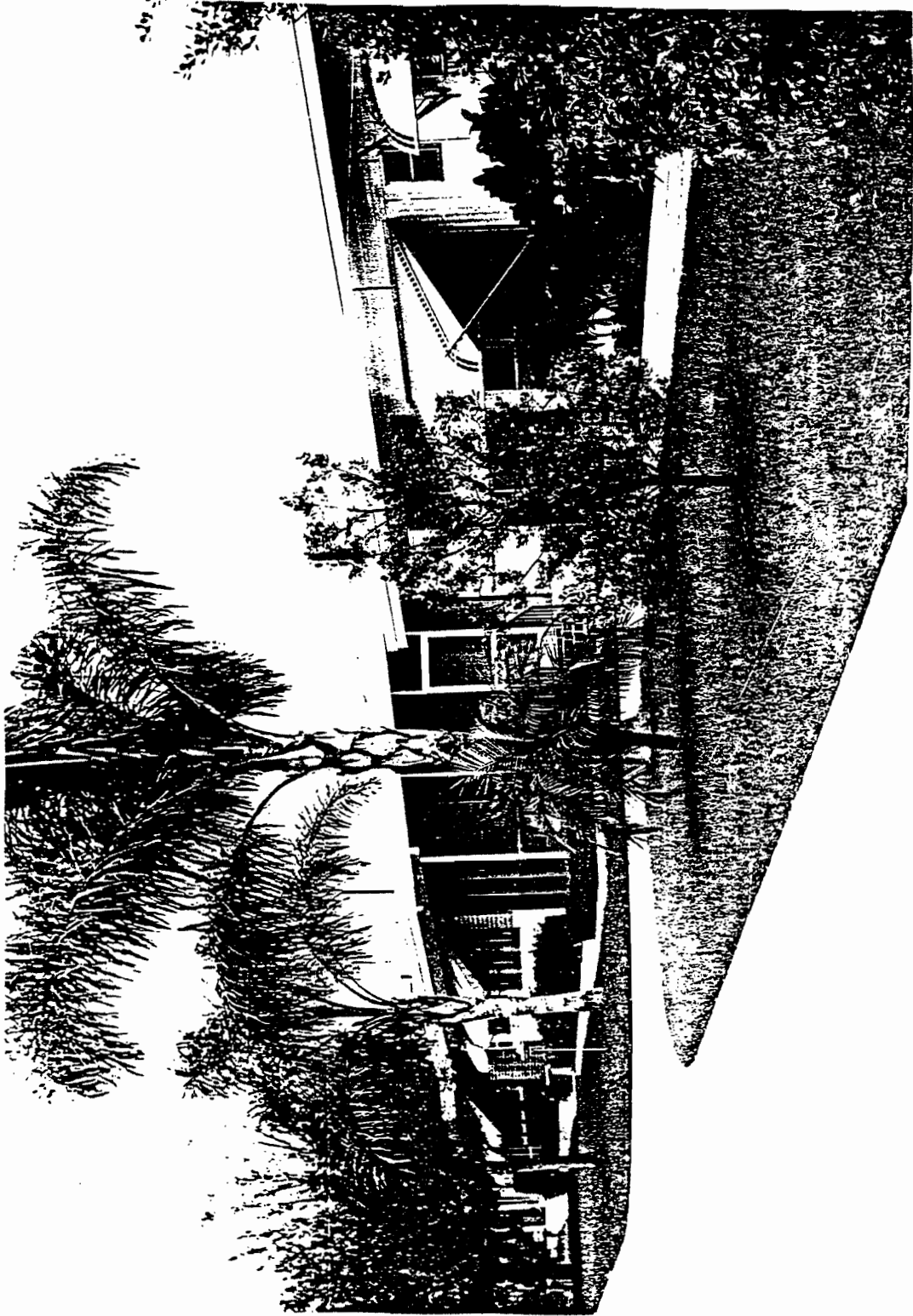


Photo: Arthur Bernhardt

FIGURE 74 : MOBILE HOME COMMUNITIES TODAY



Photo: Arthur Bernhardt

FIGURE 75 : MOBILE HOME COMMUNITIES TODAY



Photo: Arthur Bernhardt

FIGURE 76 : MOBILE HOME COMMUNITIES TODAY.

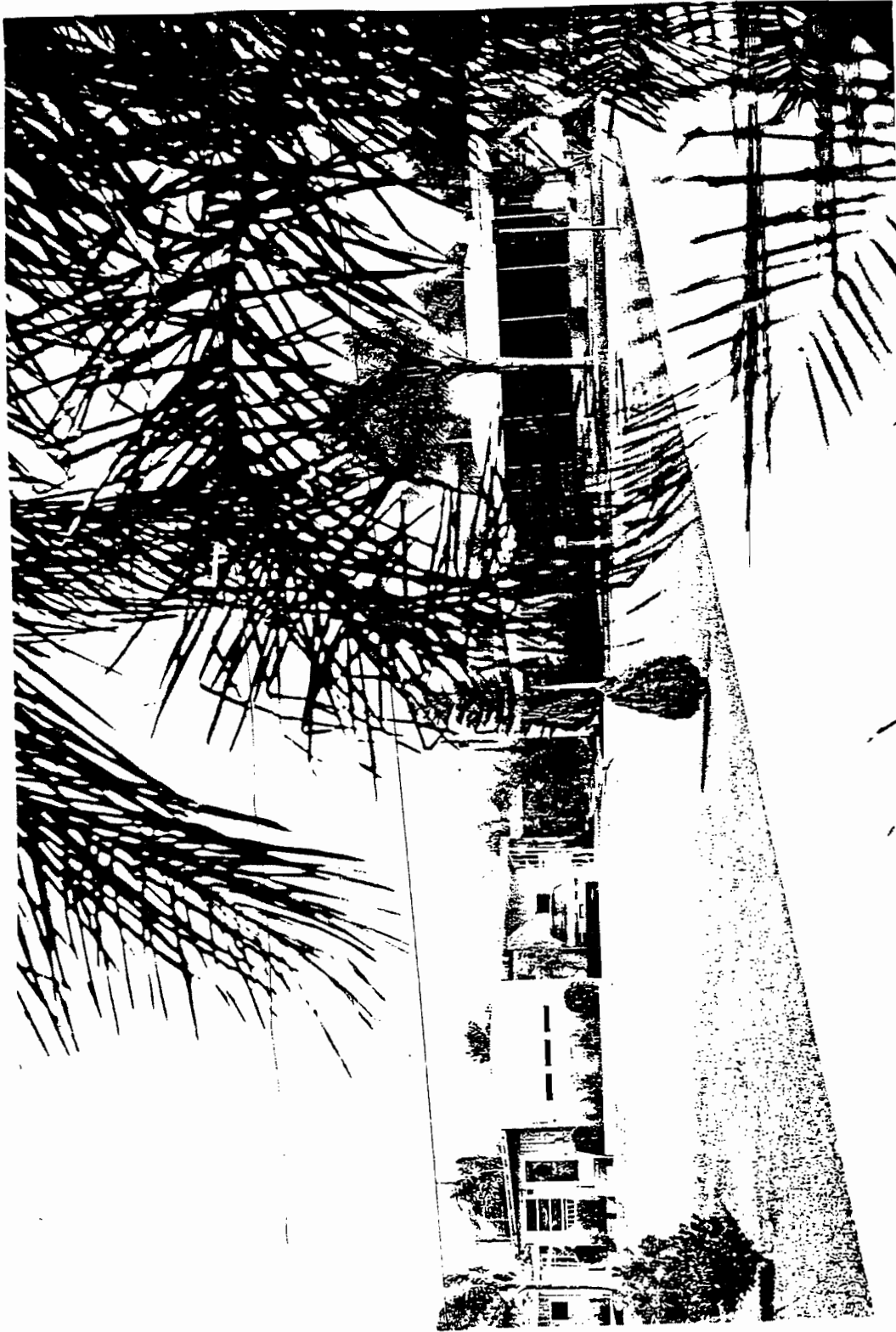


Photo: Arthur Bernhardt

FIGURE 77 : MOBILE HOME COMMUNITIES TODAY

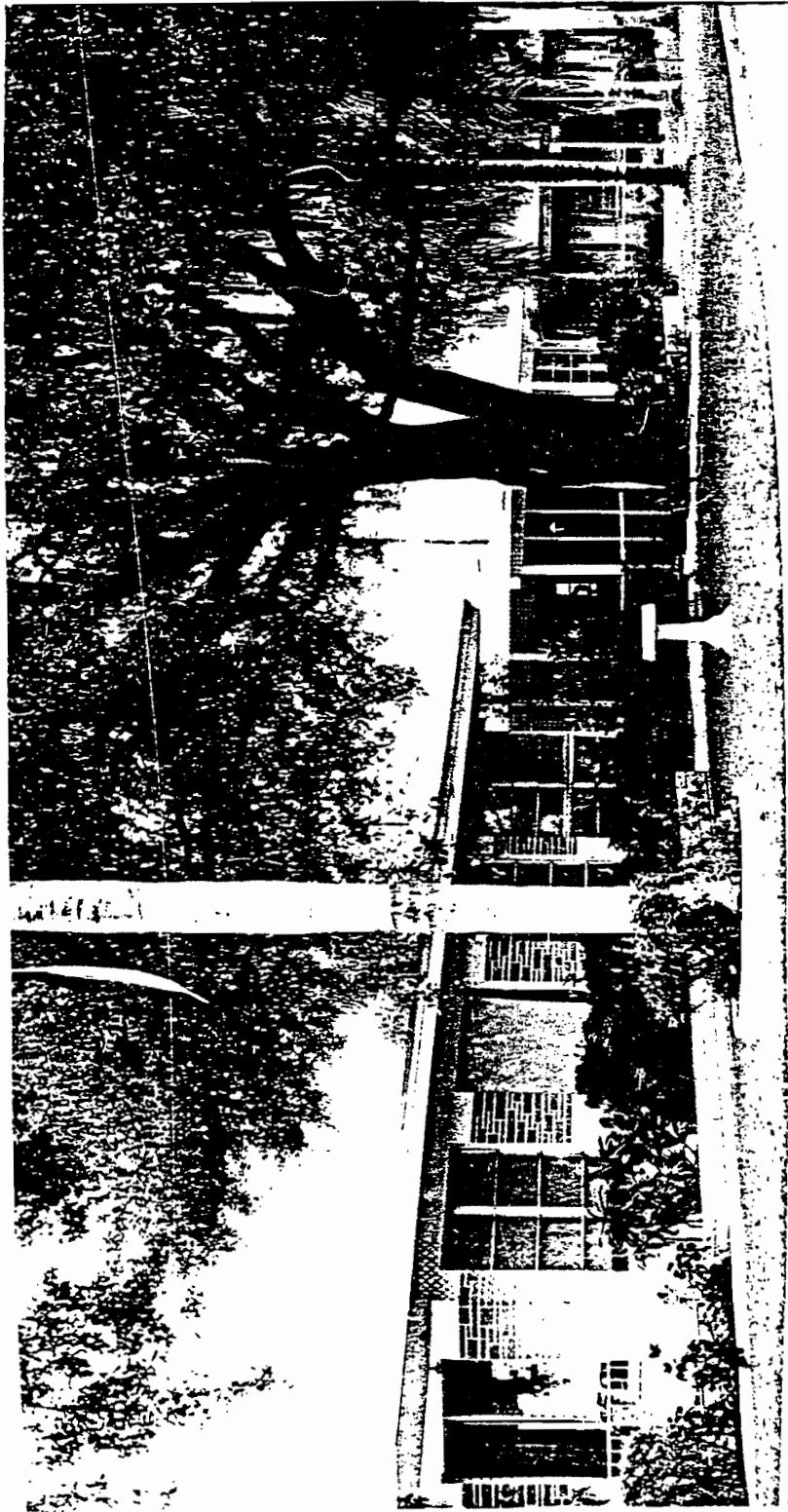


Photo: Arthur Bernhardt

FIGURE 78 : MOBILE HOME COMMUNITIES TODAY



Photo: Arthur Bernhardt

FIGURE 79 : MOBILE HOME COMMUNITIES TODAY

E.

FOOTNOTES

FOOTNOTES

1. The 1974 mobile home inventory figures were derived by PMHI from Table 1S, "Location of Mobile Homes: 1970," Subject Report HC(7) - 6 Mobile Homes, a publication of the 1970 Census of Housing, and from the annual projected shipment figures from the January issue of The Monthly Market Letter on Mobile Home Shipments which is published by the Mobile-Modular Housing Dealer Magazine. The total number of mobile homes/state figures was derived by multiplying the 1970 census figures by .90 to allow for deterioration of older mobile homes between January, 1970, and January, 1974. The 10% deterioration rate was derived from the slightly less than 2% per year deterioration rate found in the 1970 census figures. Assuming static production from one decade to the next, the deterioration rate would be 3%, but with increasing production, an additional 2% was tacked on. The industry claims that about 5% of all mobile homes are used as temporary offices, so the annual (Dealer magazine projected) shipment figures were multiplied by .95 and were added to the adjusted 1970 census figures to get the total mobile home/state figures.
2. The projections of the non-park versus park data were primarily based on two sources. The first source is a Woodall compilation of the rated park inventory for 1974. Second, upon the request of the PMHI, Woodall's Publishing Company extracted from their files, and

hand-tabulated a state-by-state and yearly (1970 to 1974) compilation of the number of deleted parks, the number of deleted spaces, and the number of parks never listed.

The method that was used by PMHI to compute the park versus non-park data is as follows: Woodall's 1974 estimates that there are 24,500 parks (rated and unrated) in the country. They list approximately 13,000 parks (included in this number are new, rebuilt, not-inspected and rated parks). Their tabulations for PMHI cover approximately another 4,200 deleted parks and approximately 700 never listed parks, bringing the total of Woodall-accounted parks to about 17,900. Therefore, there are an estimated 6,100 parks not accounted for or identified by Woodall.

In order to compute the number of mobile homes in these 6,100 parks, a phone interview was conducted with Eliot Krane, Associate Publisher of Woodall's Publishing Company, who suggested that an average size of 40 mobile homes per park should be assigned resulting in approximately 244,000 mobile homes in non-Woodall-identified parks in the country. This number, 244,000, was divided by the total of "unassigned" mobile homes in the country (2,578,642 units, approximated to 2,500,000 for convenience) and the result was a factor of .097. Each state's total mobile home figure, by Woodall, was multiplied by .903. This figure is recorded as the number of mobile homes on private property.

It must be understood that there is an inherent error factor in all

the figures utilized, since the 6,100 non-identified Woodall parks are undoubtedly distributed unevenly about the country. Nonetheless, this error is small, in the range of 5 to 10%.

3. HUD News, No. 74-256, U.S. Department of Housing and Urban Development, Washington, D.C., August 2, 1974.
4. CALCULATION OF THE DISTRIBUTION BY STATE OF THE NUMBER OF ALL PARKS. Referring to Figure 80 below, the numbers in the parentheses at the top of each tabulated column are characterized as follows:

(1) No. of units in parks: These data are taken directly from the calculations performed for item B. 1.2.1 above.

(2) No. of units in Woodall-rated parks: These data are taken from tabulations performed by the Woodall Publishing Company and released as Mobile Home Park and Space Statistics by State and Rating Category as Shown in Woodall's 1974 Mobile Home and Park Directory Plus Vacancies and Monthly Rentals. The number of units are determined by subtracting the number of vacancies from the number of spaces for the listed parks, by state.

(3) No. of units in Woodall-deleted parks: These data are established from tabulations performed for PMHI by the Woodall Publishing Company and cite parks that were once listed among the rated parks but have since been dropped from the listings because of a change in the rating standards or a deterioration of the park.

(4) No. of units in parks "never listed": These data again come

from tabulations performed by the Woodall organization for PMHI listing parks that have been identified by Woodall's for inspections but which were not of sufficient quality to bear rating.

(5) No. of units not listed: These data have been established by the following calculation -- $[(1)] - [(2) + (3) + (4)] = (5)$. Thus, by subtracting the sum of columns (2), (3), and (4) from (1), column (5) has been achieved.

(6) No. of parks Woodall-rated: These data are established from the same document as is noted for column (2) above.

(7) No. of parks deleted and never-rated: These data are established from the same tabulations by the Woodall Publishing Company as are noted above for columns (3) and (4).

(8) No. of parks not listed: These data are established by taking the data listed in column (5) and dividing by a constant amount set at 40 units/park. This constant divisor is a figure suggested by Eliot Krane of the Woodall Publishing Company as an average size for the unrated parks.

(9) Total no. of parks: These totals have been established by adding the data from columns (6), (7), and (8). To wit, $[(6) + (7) + (8)] = (9)$.

STATE	(1) NO. OF UNITS IN PARKS	(2) NO. OF UNITS IN WOODALL- RATED PARKS	(3) NO. OF UNITS IN WOODALL- DELETED PARKS	(4) NO. OF UNITS IN PARKS "NEVER RATED"	(5) NO. OF UNITS NOT LISTED	(6) NO. OF PARKS WOODALL- RATED	(7) NO. OF PARKS DELETED & NEVER- LISTED	(8) NO. OF PARKS NOT LISTED	(9) TOTAL NO. OF PARKS
ALABAMA	25160	13340	2110	200	9410	207	62	235	504
ALASKA	8590	5310	2190	600	490	68	68	12	148
ARIZONA	56120	38740	11290	2120	3970	475	221	99	795
ARKANSAS	14380	5880	2960	600	4940	136	114	124	374
CALIFORNIA	240550	194500	37380	2920	8670	2110	683	217	3010
COLORADO	27560	20950	2200	760	3650	153	54	91	298
CONNECTICUT	7420	6320	720	40	340	76	16	8	100
DELAWARE	7080	4520	1400	160	1000	53	26	25	104
FLORIDA	247060	161260	71880	1800	12120	1222	437	303	1962
GEORGIA	38580	16180	7470	560	14370	160	97	359	616
IDAHO	12230	8340	1840	240	1810	204	77	45	326
ILLINOIS	52960	38340	8200	120	6300	422	95	158	683
INDIANA	46240	35120	3900	600	6620	405	95	166	666
IOWA	24750	17730	4900	360	1760	297	136	44	477
KANSAS	18340	13580	2860	640	3260	147	94	82	323
KENTUCKY	18590	9720	1550	680	6640	112	36	166	314
LOUISIANA	15870	7040	2790	480	5560	131	97	139	367
MAINE	9050	5590	1160	40	2260	116	39	56	211
MARYLAND	13220	8090	2350	1240	1540	81	59	38	178
MASSACHUSETTS	10460	7940	1810	280	430	111	25	11	147
MICHIGAN	74040	60430	5480	120	8010	492	84	200	776
MINNESOTA	30060	22060	4060	560	3380	238	115	84	437
MISSISSIPPI	14470	4290	2330	1080	6140	90	99	154	343
MISSOURI	33900	23830	2970	960	6240	358	101	156	615
MONTANA	10430	6120	1670	200	2440	150	79	61	290
NEBRASKA	13200	8030	3040	520	1610	140	73	40	253

FIGURE 80 : DISTRIBUTION BY STATE OF ALL PARKS IN THE UNITED STATES (EXCLUDING HAWAII)

Source: PMHI calculations based on 1974 statistics of the Woodall Publishing Company (See Footnote 4)

STATE	NO. OF UNITS IN WOODALL-RATED PARKS	NO. OF UNITS IN WOODALL-DELETED PARKS	NO. OF UNITS IN PARKS "NEVER RATED"	NO. OF UNITS NOT LISTED	NO. OF PARKS WOODALL-RATED	NO. OF PARKS DELETED OR NEVER RATED	NO. OF PARKS NOT LISTED	TOTAL NO. OF PARKS
NEVADA	18740	3200	440	7920	152	63	198	413
NEW HAMPSHIRE	9990	2070	320	1160	94	53	29	176
NEW JERSEY	19670	4120	320	160	121	39	4	164
NEW MEXICO	13160	3550	440	2890	87	87	72	246
NEW YORK	44350	4130	680	9100	487	107	222	822
NORTH CAROLINA	40120	6260	480	17180	251	118	430	799
NORTH DAKOTA	7420	490	200	1160	71	13	29	113
OHIO	66170	8840	600	8660	581	138	216	935
OKLAHOMA	19480	2020	160	4200	188	47	105	340
OREGON	32120	4560	360	4350	449	127	109	685
PENNSYLVANIA	48800	5360	360	12410	488	181	310	979
RHODE ISLAND	2700	920	80	80	25	15	2	42
SOUTH CAROLINA	19280	1660	480	9970	106	52	249	407
SOUTH DAKOTA	6510	2370	700	1890	32	59	47	138
TENNESSEE	17910	7360	850	8940	124	43	224	391
TEXAS	68720	34800	3200	18340	513	278	458	1249
UTAH	9730	6350	160	1230	77	44	31	152
VERMONT	4460	2170	880	320	37	23	27	87
VIRGINIA	23800	14170	2240	7030	157	50	176	383
WASHINGTON	13450	23460	5590	6920	549	168	173	890
WEST VIRGINIA	8720	2950	840	4210	59	50	105	214
WISCONSIN	24460	15600	4310	4170	227	120	104	451
WYOMING	6380	1300	160	1300	30	32	32	94
UNITED STATES (NOT INCLUDING HAWAII)								24487

Source: PMHL calculations based on 1974 statistics of the Woodall Publishing Company (See Footnote 4)

FIGURE 80: DISTRIBUTION BY STATE OF ALL PARKS IN THE UNITED STATES (EXCLUDING HAWAII) (cont.)

PARK DEVELOPMENT AND OPERATION

HWD-1556

pt. 2

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A.

INTRODUCTION

The mobile home park is at a crucial point in its evolution. Should the park concept be strengthened or abolished? The nature of the park is unique and in many ways progressive (for example, in the perception of housing as a total service); the park today resembles a suburban subdivision rather than a campground, and it is more professionally managed than it has been in the past. On the other hand, the park has not yet freed itself from the image of its progenitor, the trailer camp, because of retrograde forces such as zoning restrictions; it is still developed and operated as a closed, isolated community, reflecting society's policy of segregation that ignores the key step in park evolution: that the mobile home is now another form of legitimate housing, permanently located on its site.

While the preceding section presented an analysis of the park system at large, this section will examine the performance of specific functions of the park system: park design, development and construction, and operation and management. This analysis will be preceded by a profile of mobile home residents because an understanding of their needs is crucial in assessing performance. Finally, this section will elucidate the restraints on the development of the park concept and explore the potentials for future evolution, illustrating the uniqueness of the park in comparison with other community types. A strategy for assuring the continued development of mobile home environments -- whether park communities or single-family scattered sites -- is essential to the health of the mobile home industry.

B.

ANALYSIS OF THE PRESENT SITUATION
AND EMERGING TRENDS

1.

Occupant Profiles

Industry surveys taken at different times in different types of parks give a changing profile of mobile home occupant groups. The 1970 Census indicates that the primary, but not exclusive, demand for mobile homes stems from moderate income groups: blue-collar working families and retirees. The number of families with children is surprisingly high, given the small size of most units. An accurate occupant profile is a prerequisite for evaluation of user needs and park design (see Chapter 2, Park Design and Construction).

Income, ownership, occupation, education, age and family size are the most important factors affecting park design and performance. In each of these aspects except education, mobile home occupants differ significantly from the rest of the population. Their income is much lower than incomes of families in conventional housing who are, however, less likely to own their homes. The proportion of blue collar workers is higher and white collar workers lower, than for the population as a whole. There are more young families, which results in smaller families with more children under six and fewer under eighteen.

Income is the most important difference between families in mobile homes and those in conventional housing. The income gap affects expectations and determines the quality of life mobile home occupants can afford. The industry's greatest success is that it can provide

home ownership for these lower-income families without subsidy.

Recent trends to increase the size and upgrade the quality of mobile homes and parks will gradually attract consumers who presently do not consider mobile home living an acceptable housing alternative, while continuing to meet the needs of the group which the industry now serves, thereby decreasing the gap between mobile home families and conventional housing families.

1.1 INCOME

The income of mobile home families is much lower than the income of conventionally housed families, particularly those in suburban areas. In rural areas, this difference is the least pronounced.

Median family incomes in 1969 are summarized in Figure 1. The median 1969 income of mobile home families, \$6,690, compares to a median of \$9,433 for all families, \$11,090 for families in suburban areas, and \$7,980 for families in rural areas. Mobile home families had higher incomes than renters of mobile homes or conventional housing.

	Mobiles	All Families
<u>MEDIAN</u>	<u>\$6,690</u>	<u>\$9,433</u>
Under \$5,000	35.9%	20.0%
\$5-6,999	17.3%	12.3%
\$7-9,999	23.1%	21.7%
\$10-14,999	18.0%	26.7%
\$15,000	5.7%	19.3%
<u>MEDIAN</u>		
Central City	N/A	\$9,150
Suburban	N/A	11,090
Rural	N/A	7,980
Owner	\$7,000	\$9,700
Renter	\$5,000	\$6,300

Source: 1 (Table A-1); 2; 4 (Table A) (See D. Footnotes)

FIGURE 1: FAMILY INCOME IN 1969

Median family income in new mobile homes is higher, reaching \$7,700 for families who own homes less than five years old:

AGE OF MOBILE HOME	OWNERS	RENTERS
MEDIAN	\$7,000	\$5,000
1 yr	7,500	5,500
2-5 yrs	7,700	5,600
6-10 yrs	6,900	5,200
11-20 yrs	5,000	4,300
21 yrs or more	5,600	3,900

Source: 1 (Table A-1), 1970 Census

FIGURE 2: INCOME OF MOBILE HOME FAMILIES, 1969

Families in mobile homes more than ten years old represented only 25 percent of the mobile home population in 1970. The high rate of sales from 1970 to 1974 indicates the proportion of older mobile homes could decrease further.

Earlier income comparisons indicated a smaller gap between mobile home and conventional housing families than the 1970 Census figures. The 1965-66 HUD/Census survey of 2900 new mobile home occupants found an income difference of about \$800:

	New Mobiles 1965-66	All Families 1967 CPS
MEDIAN	\$6,620	\$7,440

Source: 6, 7

FIGURE 3: INCOME IN 1965-66

However, this survey was based solely on a sample of recently purchased mobile homes, whereas the 1966 income of all families included residents of both new and old housing. The conclusion implied in Figure 3, that purchasers of new mobile homes have relatively higher incomes, has some marketing value but it does not correctly portray the income level of all mobile home occupants. Moreover, the more accurate 1970 Census indicated the income gap between occupants of new mobile homes and the population as a whole exceeded \$1,700.

These income characteristics have significant implications regarding demand and design standards for mobile homes and parks. On the positive side, the relatively higher incomes of mobile home owners, compared to conventional housing renters, indicate that mobile home ownership is a matter of choice and that these families simply prefer it to renting conventional housing of generally higher density. Of the population sample including all renters and all mobile home families in the US, mobile home families were roughly 15 percent of the total in 1974, and the proportion was increasing rapidly. A 1965 industry survey of 775 mobile home families indicated almost one-fourth preferred mobile homes to conventional home ownership, cost and other factors considered:

Mobile Home	33.8%	
Rented Apartment	21.3%	34.0%
Rented House	12.7%	
Owner House	23.2%	
Other	9.0%	

Source: Mobile Life Consumer Survey

FIGURE 4: OWNER'S LAST RESIDENCE BEFORE MOBILE HOME

The relatively lower incomes of mobile home families, however, compared to the population as a whole, indicates cost plays a dominant role in housing selection. The relatively lower expectations (as opposed to needs) of lower and moderate-income groups explains to some degree the relatively lower design standards found in mobile home parks compared to conventional single-family subdivisions. However, as will be discussed in Chapter 2, the potential exists for the mobile home industry, without raising costs significantly, to meet user needs as well as expectations by improvements in mobile home community design.

1.2 OWNERSHIP

The desire for privacy and ownership inherent in the "Great American Dream" to own a single family home is the most important user preference affecting mobile home demand. Mobile home families are more likely to own their own homes (85 percent) than families in conventional housing (63 percent).^{1,2} This characteristic provides a measure of stability for mobile home parks that is not found in rental housing. It refutes the obsolete stereotype characterization of the mobile home occupant as a transient whose contribution to the community is temporary in nature. Over half of the 775 families surveyed by Mobile Life Magazine in 1965 had not moved in the last five years - another third had moved only once or twice.

None	54.2%	
One	22.9%	
Two	11.2%	34.1%
Three	5.8%	
Four or more	5.9%	

Source: 8

FIGURE 5: NUMBER OF MOBILE HOME MOVES DURING THE PAST FIVE YEARS

Although precise figures are not available, this suggests that mobile home families move less often than families in rental housing. Community opposition to mobile home parks based on transience is understandable only if conventional rental units in the community are restricted for the same reason.

1.3 OCCUPATION AND EDUCATION

In mobile home communities, the proportion of blue-collar workers is higher and white-collar workers lower than in conventional housing. Farm and service workers are rare. More mobile home families are not in the labor force (retired, unemployed, students, etc.) than families in conventional housing (FIGURE 6):

	Mobiles	All Households
Professional/Technical	6.3%	11.3%
Managers/Administators	5.0%	8.5%
Clerical/Sales	8.4%	12.4%
Craftsmen	18.0%	14.4%
Other Blue Collar	22.6%	16.6%
Farm Workers	2.7%	2.8%
Service/Private Household	6.2%	6.7%
Not in Labor Force	30.8%	27.3%
# Units	2,073,944	63,573,042

Source: 1 (Table A-2), 3 (Table 23) - 1970 Census

FIGURE 6: OCCUPATION OF HOUSEHOLD HEAD, 1970

Surveys based on selected samples, such as quality parks (rated 4 or 5 stars) or parks near military installations yield a different occupant profile. The 1965 Mobile Life Survey of 775 families indicated there were more military personnel than retirees, and the proportion not in the labor force was lower than the 1970 Census figures (FIGURE 7).

The Urban Land Institute's 1972 survey of 220 quality mobile home parks found a much higher percentage of retirees, particularly in one region.¹⁷ Some of these differences are due to terms used in each survey. However, they confirm the need to clearly define the sample and to consider the distinctions between parks oriented towards different occupant groups.

Professional	15.3%
Clerical/Sales	10.2%
Skilled	25.1%
Farm Workers	1.5%
Laborers	8.7%
Military	12.0%
Retired	8.8%
Other	18.4%

FIGURE 7: OCCUPATION OF HOUSEHOLD HEAD, 1965
MOBILE LIFE SURVEY, 775 FAMILIES

Education levels of mobile home families compare favorably to levels for all households (median about 12 years - FIGURE 8):

	Mobiles	All Households
Owners	11.8 Yrs	12.1 Yrs
Renters	12.0 Yrs	

Source: 1 (Table A-3), 3 (Table 11), 1970 Census

FIGURE 8: EDUCATION OF HOUSEHOLD HEAD
MEDIAN NUMBER OF YEARS

1.4 AGE

There are more young families in mobile homes but proportionally fewer senior citizens than in conventional housing. Surprisingly, more than one-third are in middle age groups (Age 30 - 54 - see FIGURE 9):

	Mobiles		All Households	
Under 25	18.2%		7.3%	
25-29	15.2%	33.4%	9.5%	16.8%
30-34	9.1%		8.9%	
35-44	12.7%	35.0%	18.6%	46.9%
45-54	13.2%		19.4%	
55-64	14.4%		17.0%	
65 and Over	17.2%	31.6%	19.3%	36.3%

Source: 1 (Table A-1) and 3 (Table 1), 1970 Census

FIGURE 9: AGE OF HOUSEHOLD HEAD, 1970

The relatively large number of young families (twice as many as in conventional housing) differs from the results that most industry sources have obtained by other surveys. Once again, the sample selected is significant. For example, 70 percent of the quality parks surveyed by the Urban Land Institute in 1972 were restricted to adults only, yielding a quite different occupant profile (FIGURE 10).

Young Marrieds	9.0%	(47% in Highest Region)
Middle Age	27.0%	
Elderly	26.0%	(45% in Highest Region)

Source: 17, Mobile Home Parks, Part Two, An Analysis of Communities
Urban Land Institute

FIGURE 10: AGE OF HOUSEHOLD HEAD, 1972
ULI SURVEY, 220 QUALITY PARKS

These parks were clearly oriented more towards retirees than young marrieds, in contrast to parks in the national sample.

1.5 FAMILY SIZE

Mobile home families are somewhat smaller (median 2.3 persons per household) than conventional housing families (median 2.7 persons per household). They have more children under 6, fewer children under 18. They have more children than families in apartments, regardless of age group. FIGURE 11 describes comparative family size and FIGURE 12 the incidence of children in various types of housing.

	Mobiles	All Households
<u>MEDIAN</u>	<u>2.3</u>	<u>2.7</u>
1	20.4%	17.5%
2	36.9%	29.5%
3	19.7%	17.2%
4	13.0%	15.5%
5	5.9%	9.8%
6	2.5%	5.4%
7 or more	1.6%	5.1%

Source: 1 (Table A-1) and 3 (Table 23) and 18 (Table A-1),
1970 Census

FIGURE 11: PERSONS IN HOUSEHOLDS, 1970

The number of mobile home families with children under 18 is about 40 percent of the total, compared to 44 percent for all households. Almost 27 percent have young children (under 6), compared to 21% for all

households. A substantial portion of families with children are found in rural areas where density is not a restraint, indicating that the number of children in suburban mobile home parks is probably lower than 1970 Census figures suggest. Most industry surveys confirm a relatively low number of children in parks, but figures vary considerably for different samples.

AGE	MOBILES	ALL HOUSEHOLDS	SINGLES	MULTI- FAMILY UNIT	**
<u>Under 18</u>					
None	60.2%	55.7%	49.9%	71.7%	- 79.8%
1	18.3%	14.6%	15.0%	13.2%	- 9.7%
2 or more	21.5%	29.7%	35.1%	15.1%	- 10.5%
<u>Under 6</u>					
None	73.3%	79.1%	78.2%	81.8%	- 88.3%
1	17.8%	13.2%	13.6%	12.1%	- 7.9%
2 or more	8.9%	7.7%	8.2%	6.1%	- 3.8%
# Units (millions)	2.1	63.4	44.0	4.5	4.0

** First column in Multi-family is housing with 5 - 19 units per building, second column 20 units or more per building.

Source: 2 (Table A-5), 1970 Census

FIGURE 12: CHILDREN IN HOUSEHOLDS, 1970 Census

At one extreme, the Urban Land Institute survey of predominately adults-only parks (70 percent) indicated an average of 0.2 children per unit, with 0.7 children per unit in the region with the most

children.¹⁷ One land planner, citing numerous surveys, suggests that one child for every five mobile homes (0.2 children per unit) is a widely accepted figure, compared to 1.5 children for conventional single family homes.¹⁹ PMHI's analysis of the ULI study and 1970 Census figures, however, indicate that 0.2 children per unit is a valid figure only for parks oriented towards adults, and the median is clearly somewhere between this figure and the US median, 1.36 children per family in 1970.²

At the other extreme, parks oriented almost exclusively towards families, such as parks on military installations, may have almost as many children as conventional housing projects. One commercial park near a short-term military school in Alabama is occupied predominately by young officers; almost all have children and many have two or three.

The number of children per unit is an extremely important factor affecting the design of mobile homes and parks and the impact of proposed parks on the community (particularly schools). Accurate census figures for numbers of children per unit for various types of housing are not available. However, the average number under 18 can be estimated from 1970 Census data. PMHI's analysis of the census, mobile home surveys, a recent survey of 1700 townhouse residents and average bedroom count of various housing types suggests

the approximate "medians" shown in FIGURE 13.

	BEDROOMS PER UNIT	CHILDREN PER UNIT
Mobile Homes (20% Double-Wides)	2.5	0.7
Conventional Singles	3	1.5
Townhouses	3	1.0
Walk-up Apartments	2	0.5
US MEDIAN, 1970	N/A	1.36

Source: 1970 Census and Carl Norcross, Townhouses and Condominiums, Urban Land Institute, 1973

FIGURE 13: NUMBER OF CHILDREN PER UNIT

More important from the point of view of determining the school impact of a mobile home park is the number of children in various age groups. Age groups shown in the 1965 Mobile Life Survey are roughly consistent with 1970 Census data. The survey indicated that 36 percent of mobile home families had pre-school children, 21 percent had children in kindergarten to grade 6 and 16 percent had children in grades 7 - 12 (FIGURE 14). Although these indicators of family size are less accurate than desirable, they do provide an order of magnitude estimate of the number of children in mobile home parks.

NUMBER OF CHILDREN	PRE-SCHOOL	KG-GRADE 6	GRADE 7-12
0	63.8%	79.4%	84.2%
1	18.7%	11.9%	11.8%
2	13.6%	6.0%	3.1%
3	2.8%	2.2%	0.9%
4 or more	1.1%	0.5%	0.0%

Source: 8

FIGURE 14: CHILDREN IN HOUSEHOLDS, 1965
775 MOBILE HOME FAMILIES

It is readily apparent that increases in the size of mobile homes and number of bedrooms will increase family size and the number of children in this form of housing.

1.6 ADULT, FAMILY AND STUDENT PARKS

Mobile home parks can be grouped into three broad categories, based on their primary source of occupants:

Adult Parks

Family Parks

Student Parks

Adult parks are oriented towards senior citizens and tend to be located in warm weather locations. Children may be excluded entirely, or families with children may live in a separate section of the park. Community facilities play a dominant role in encouraging group activities. Parks oriented towards families with children place greater emphasis on economy and tend to have fewer community facilities than adult parks (a pool and laundry are the most common). Park locations closer to employment centers are needed for this group. Parks for students serve a pressing need for low-cost housing near education centers, especially for young married "student" families not on the labor force. The remainder of mobile home parks include parks for temporary use for such groups as construction

and seasonal workers, but these parks are relatively small in number.

Each of these occupant groups has different priorities, and parks differ in design and scope to accommodate these differences. User needs and design features are discussed in Chapter 2, Park Design and Construction.

2.

Park Design and Construction

Analysis of mobile home park design and construction focused on seven areas of concern:

User Preferences

Factors Affecting Park Location

Park Size/Density/Land Use

Community Facilities

Street and Lot Patterns

Utilities and Services

Construction

In each of these areas, existing mobile home parks and conventional housing projects were compared by PMHI and trends in park design and construction identified. While much of this analysis draws on first-hand experience in the field, primary sources used include designs published in industry journals, designs forwarded to PMHI by professional design firms, Woodall's directories, and industry studies of user needs.

2.1 USER PREFERENCES

User preferences affect mobile home demand, mobile home design, park location, and park design. The focus of this chapter is on those factors that affect mobile home park design. PMHI identified five broad areas into which these preferences can be grouped:

Privacy

Landscaping and Open Space

Community Activity

Variety and Individuality

Economy

Existing mobile home parks vary considerably in terms of responsiveness to these user needs. An effective measure of park quality, which incorporates many of the elements that affect the needs identified above, is the Woodall rating system.

Woodall's rating system has encouraged park improvements for many years, as park operators recognize that financial success may be contingent upon achieving a high-quality rating. Median rentals are higher in states with a relatively large proportion of 4 or 5 star parks (Figure 15). From the point of view of both owner and user, a quality park makes sense. In a 1968 survey of parks in California, 19 out of 20 mobile home owners said they prefer their mobile homes to

apartments or conventional housing.¹ This indicates that parks in California have been reasonably successful in living up to Woodall's standards.

Privacy is stressed in the responses to many industry surveys; privacy usually being more important for families on private lots than for families in parks. Dominant among the responses to PMHI's Park Survey was a desire for lower densities and larger lots, which clearly relate to privacy. A 1965 industry survey indicated that a lot of about 5400 square feet was preferred by almost half of the occupants. PMHI anticipates that the figure would be higher today due to larger unit sizes now being sold. More extensive surveys regarding privacy features have been accomplished outside the mobile home park industry. A recent study of 1700 townhouse residents stressed landscaping, open space, space around buildings, and other features that affect privacy (Figure 16)². Sixty-three percent preferred an enclosed patio with fencing on all three sides as an effective means of achieving privacy.

Landscaping and open space were the two user needs stressed the most in the responses of townhouse residents. Forty-two percent wanted more trees, woods, and landscaping; 27% wanted more open space. The density range of the townhouse projects, 6 to 10 units per acre, was higher than most mobile home parks, but it is unlikely that the items mentioned in a similar survey of mobile home families would be significantly different. These are just the features that are most often lacking in typical mobile home parks.

Community activities are important to townhouse and mobile home park residents alike. In the townhouse survey, play or recreation space ranked third on the list of priorities, followed closely by convenience to shops. The isolated location of many mobile home parks causes even greater emphasis to be placed on community facilities, particularly in adult parks.

Variety and individuality are important to most housing residents, particularly single-family and townhouse residents. The wide variety of unit accessories and landscaping features with which owners "decorate" their homes is sufficient evidence of the strong desire for individuality. Despite the overall sameness of most mobile home designs, families are remarkably successful in achieving this objective. The preference for parking cars off-street, on a lot beside each home (75%)³, is due in part to convenience but also to the desire to have a clearly defined space under the control of the owner.

Economy remains a major user need and limits the number of improvements that mobile home occupants are willing to pay for. Features which residents of conventional housing might find mandatory may greatly exceed the expectations and income of mobile home residents, or may not be desired at all. Evaluating the design and performance of mobile home parks should be accomplished with this in mind.

THIS PAGE REPRESENTS PAGE 302, WHICH HAD THE
FOLLOWING COPYRIGHTED MATERIAL:

FIGURE 15: MEDIAN RENTALS COMPARED TO PARK QUALITY

Woodall's Directory of Mobile Home Communities, 1971;
Woodall's Mobile Home and Park Directory, 1973,
Woodall Publishing Company, 500 Hyacinth Place, Highland
Place, Highland Park, Illinois 60035.

THIS PAGE REPRESENTS PAGE 303, WHICH HAD THE
FOLLOWING COPYRIGHTED MATERIAL:

FIGURE 16: OCCUPANT OPINION SURVEY, 1700 RESIDENTS
49 CALIFORNIA/WASHINGTON DC TOWNHOUSE/CONDOMINIUM PROJECTS

Carl Norcross, Townhouses and Condominiums, ULI, 1973.

2.2 FACTORS AFFECTING PARK LOCATION

There are several complex factors affecting mobile home park location. Chance, user needs, community opposition, and site characteristics play major roles in site selection. These related factors are affected by the trend towards suburbanization of America, particularly employment centers, and by the recent counter-trend towards urbanization instigated by the energy crisis.

Chance was the dominant factor affecting the location of early trailer camps, and it has only recently decreased in importance. Trailers were found on empty lots, behind gas stations, on the edge of town, and in farmer's fields:

"Having discovered the cheapest living in the US, many of these gasoline Bedouins settled down at congenial oases; they unhitched the tow car, hiked up the trailer on blocks and called it home." ("200,000 Trailers", Fortune, March 1937).

In short, the first trailer camps were not planned — they just happened. Traces of these parks linger on today, particularly in rural areas. During field interviews conducted by PMHI with park owners, many stated that they had not consulted anyone regarding

the location of their parks. However, proximity to the main highway, shopping, residential areas, and flourishing communities were cited as major factors affecting location, so the sites were not selected entirely by chance. In 1972, a survey of 220 quality parks (rated 4 or 5 stars) also stressed the element of chance:

"It appears that the location of the mobile home parks within a particular community has been more the result of chance and the presence or absence of public regulation than of choice." 4

The haphazard siting of mobile homes and parks resulting from this lack of planning has contributed substantially to the unfavorable image of the industry in many areas. Figure 17 summarizes the park surroundings found in three surveys:

	<u>Oklahoma</u> 91 Parks: 1961	<u>Arizona</u> 1962	<u>United States</u> 220 Parks: 1972
Residential		34%	
Single-family			50%
Apartments			24%
Commercial	82%	47%	24%
Industrial		19%	19%
Flood Plains	21%		
Vacant Land			38%
Other			33%

Source: "Oklahoma Mobile Home Park Survey," 1961
 Fieser, Max E. "Arizona Mobile Home Park Survey,"
 Arizona State Univ., Oct. 1962
 "Mobile Home Parks, Part 2, An Analysis of Com-
 munities," ULI 5

Figure 17: PARK SURROUNDINGS

Although the quality parks in the 1972 Urban Land Institute survey were more likely to be in residential areas than the Oklahoma and Arizona parks surveyed ten years earlier, a relatively high proportion remained in commercial, industrial and institutional areas. The Mobile Home Manufacturers Association has long recognized that improving the location and design of mobile home parks, in response to user needs, is necessary. MHMA has contributed significantly to this favorable trend. Planning officials are now beginning to recognize that mobile home parks are simply another form of residential land use and families within them have the same user needs as families in conventional housing. The most important user needs affecting park location are economy, privacy and proximity to work.

Land cost has a significant influence on total initial costs, even though most parks are located in suburban areas or on the rural fringe of cities (see Section on Cost/Price Analysis). The low cost of mobile homes, combined with relatively low density, limits the price most users will pay for a developed site. The cost of land plus site development approaches, in some cases, the cost of the mobile home itself, and this is rarely true in conventional housing. This supply/demand relationship has forced park developers to seek lower-cost land in areas further from the center city or in less desirable locations than conventional housing projects.

The desire for privacy inherent in the preference for single-family living also affects park location. Typical new parks have

densities of 5 to 7 units per acre; older parks maintain up to 10 units per acre. Although these are higher than conventional single-family densities and are in the same range as townhouses, they are not high enough for mobile home parks to compete successfully for high-priced land in desirable, suburban locations.

For working families, proximity to work is a major user need affecting park location. Privacy and convenience to work are trade-off values that are typically in opposition. The location of most parks, in suburban/rural areas, does not create major commuting problems for blue-collar workers, who are more likely to be employed in the suburbs than white-collar workers.

Mobile home parks have proportionately more blue-collar workers and fewer white-collar workers than the population as a whole, not least because of the distance of parks from the center city (see Park Development and Operation: Chapter 1, Occupant Profiles). As recent trends towards the suburbanization of retail trade and other white-collar employment centers progress, this could change. Demand for mobile home parks among moderate-income white-collar workers is restrained primarily by park location, not necessarily because tastes differ. However, suburbanization may not continue indefinitely. Trends halting the outward growth of cities are beginning to emerge as a result of the energy crisis and increased availability of mass transit. These trends could accelerate demand for higher-density housing which is currently not being produced by many mobile home manufacturers.

For retirees, the desire for economy and a pleasant environment in which to live are most important. Proximity to work is clearly not important, although shopping and other community facilities which all families need limits to some degree how far from the center city a retirement-oriented park can be. Resort parks in isolated locations tend to have more community facilities and self-contained activities than suburban family parks.

The relative importance of user needs affecting park location was addressed in a 1963 survey of park occupants. The survey distinguished responses of owners and renters and distinguished families in parks from those on private lots:

	<u>Owners</u>		<u>Renters</u>	
	In Parks	Private Lot	In Parks	Private Lot
Privacy	38%	66%	19%	58%
Economy	30%	47%	18%	19%
Near Work/Shop	36%	33%	72%	42%
Services	26%	11%	22%	9%
Family Ties	13%	24%	9%	23%
Close to Friends	6%	15%	10%	10%

Source: Consumer Survey, Mobile Home Journal, 1963

Figure 18: FACTORS AFFECTING PARK LOCATION.

The survey clearly indicates that economy is more important for owners than renters, particularly for families on rural private lots. For renters, proximity to work and shopping are most important. Privacy is stressed by occupants of private lots, as might be expected. Availability of services ranks behind these factors and

is closely related to convenience to work and shopping. Ties with family and friends are mentioned but clearly are considered less important than other factors.

Community opposition to mobile homes, because of their appearance, occupancy, and environmental impact is also an important location factor. Most often, this opposition takes the form of zoning regulations which exclude mobile homes entirely or restrict them to parks, often in the least desirable areas (see Volume V, Public Regulation, Section on Land Use Controls). The availability of land which can be zoned for mobile home parks is one of the developer's primary concerns. Many sites in residential areas which would otherwise be very desirable are ruled out because of zoning restraints.

Site characteristics, such as surroundings, vegetation, community facilities, topography, availability of utilities, views and numerous other features also affect park location. Such characteristics are compared by developers to site characteristics of other mobile home parks in the area in order to determine the probability of success.

PMHI's Park Survey confirms that concern for user needs, community opposition, and favorable site features were primary location factors:

	<u>% of Respondents Mentioning Each Factor</u>
High Demand for Park Spaces in Area	53%
Favorable Location (To Shopping/Employment/Transportation)	53%
Attractive Natural Features	37%
Favorable Zoning	35%
Attractive Surroundings	28%
Low Land Costs for the Area	20%
Low Construction/Utility Costs	20%
Other	15%

Figure 19: FACTORS AFFECTING PARK LOCATION

From the point of view of both the user and the developer, user needs, community opposition, economy and favorable site characteristics are primary factors affecting park location. The developer is also concerned with profit, but a site which does not respond to user needs will not be as profitable as one which does. Increased interest in the elements which distinguish one site from another provides evidence that the location of mobile home parks is less a matter of chance than it once was. This relatively new land-use form will become an integral element of the entire residential community in the future. As the design of mobile homes comes closer to the design of conventional housing, community opposition will diminish, increasing the availability of land.

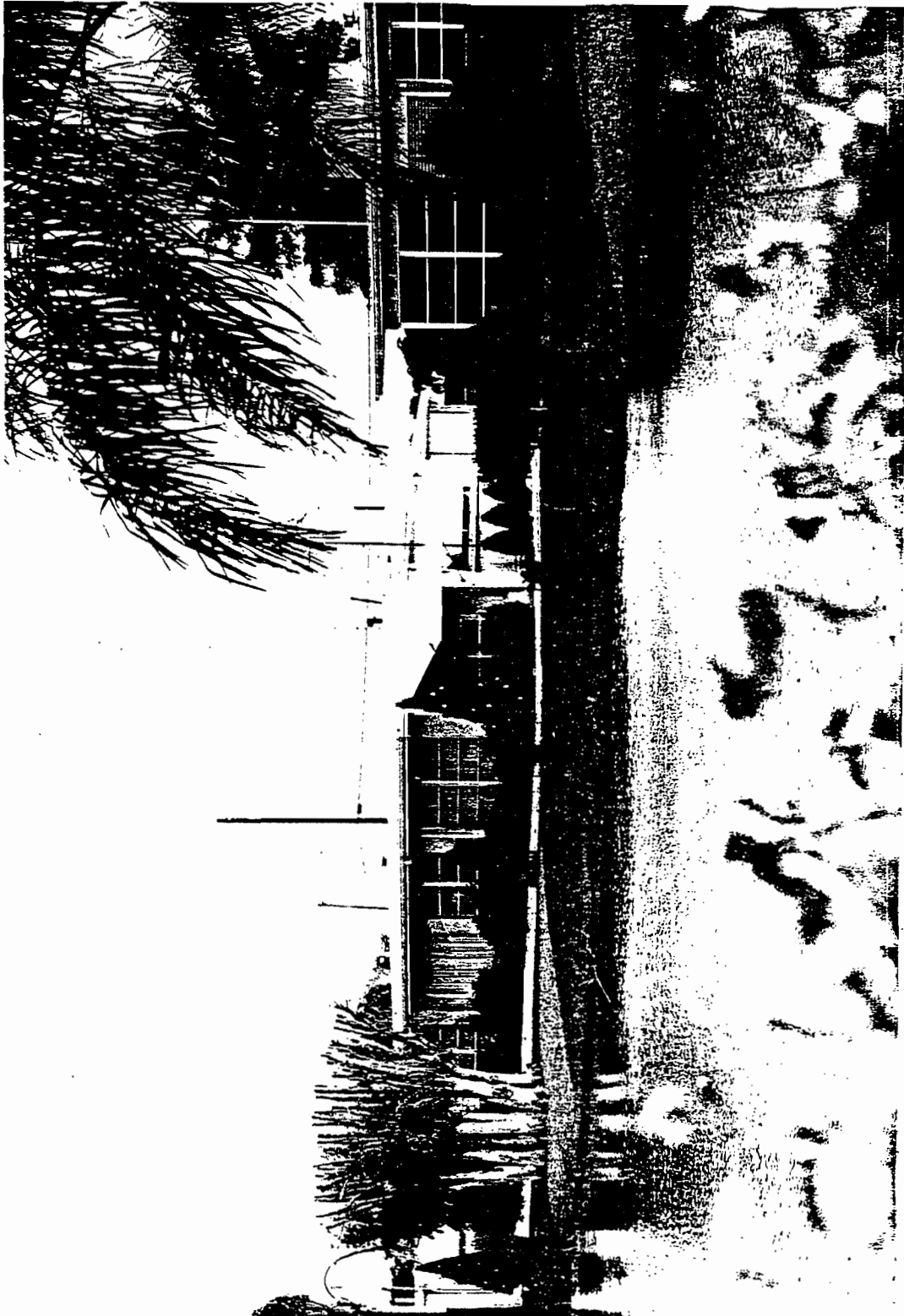


PHOTO: ARTHUR BERNHARDT

FIGURE 20: MOBILE HOME COMMUNITIES TODAY

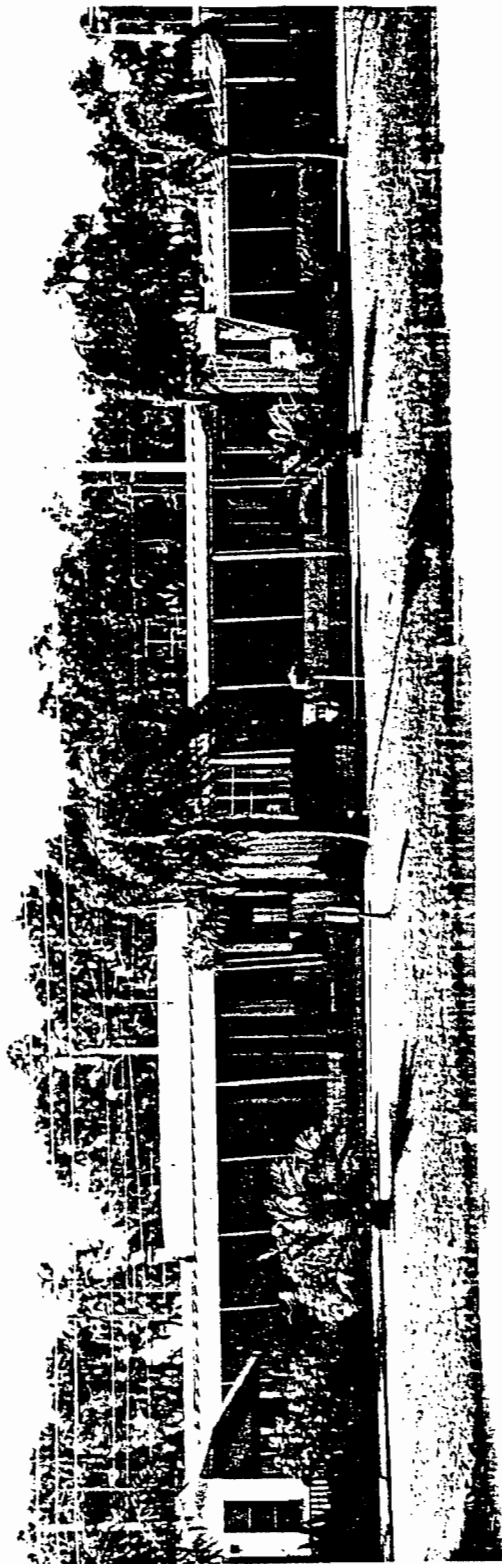


PHOTO: ARTHUR BERNHARDT

FIGURE 21: MOBILE HOME COMMUNITIES TODAY



PHOTO: ARTHUR BERNHARDT

FIGURE 22: MOBILE HOME COMMUNITIES TODAY



PHOTO: ARTHUR BERNHARDT

FIGURE 23: NOBILE HOME COMMUNITIES TODAY

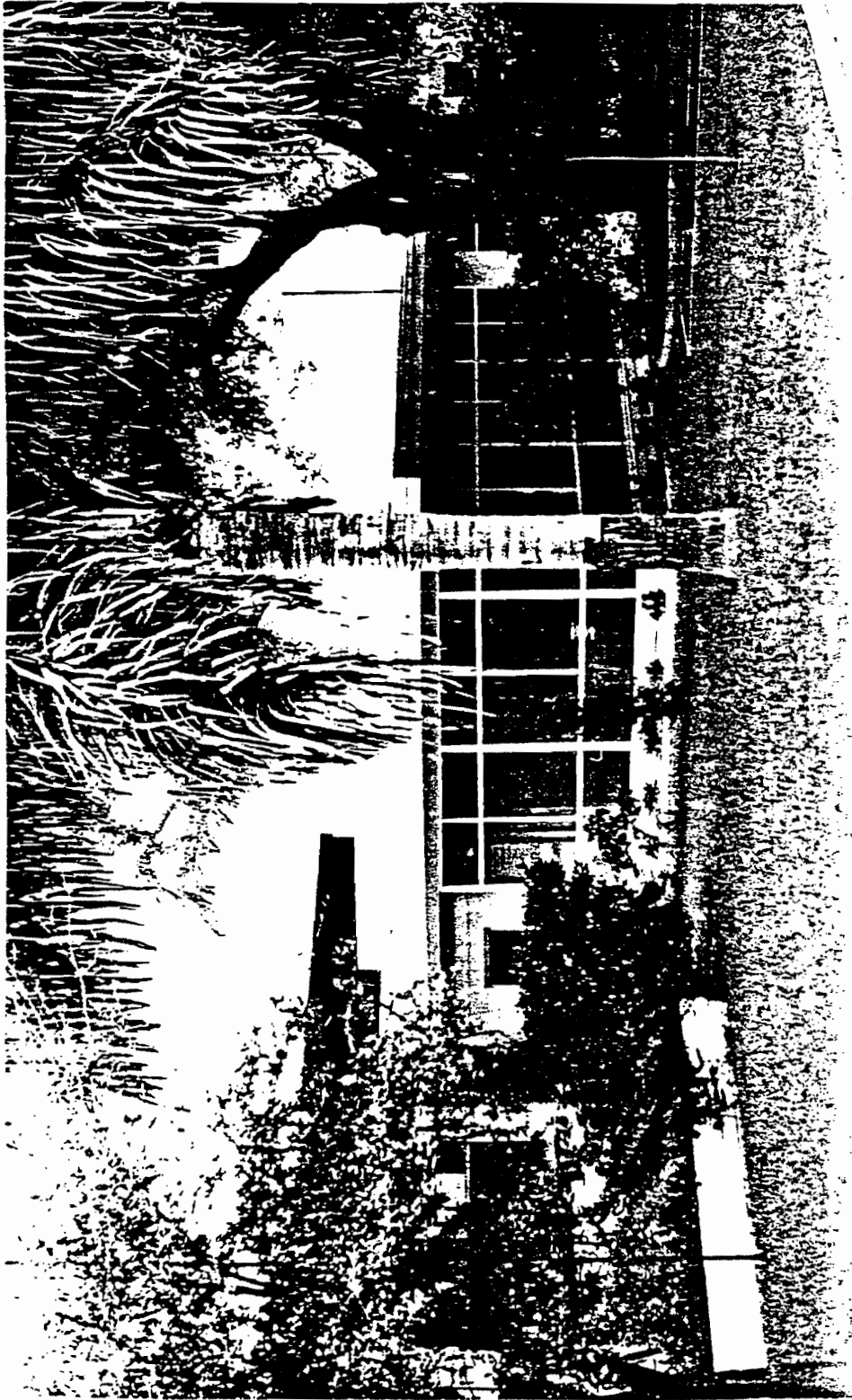


PHOTO: ARTHUR BERNHARDT

FIGURE 24: MOBILE HOME COMMUNITIES TODAY



PHOTO: ARTHUR BERNHARDT

FIGURE 25: MOBILE HOME COMMUNITIES TODAY



PHOTO: ARTHUR BERNHARDT

FIGURE 26: MOBILE HOME COMMUNITIES TODAY

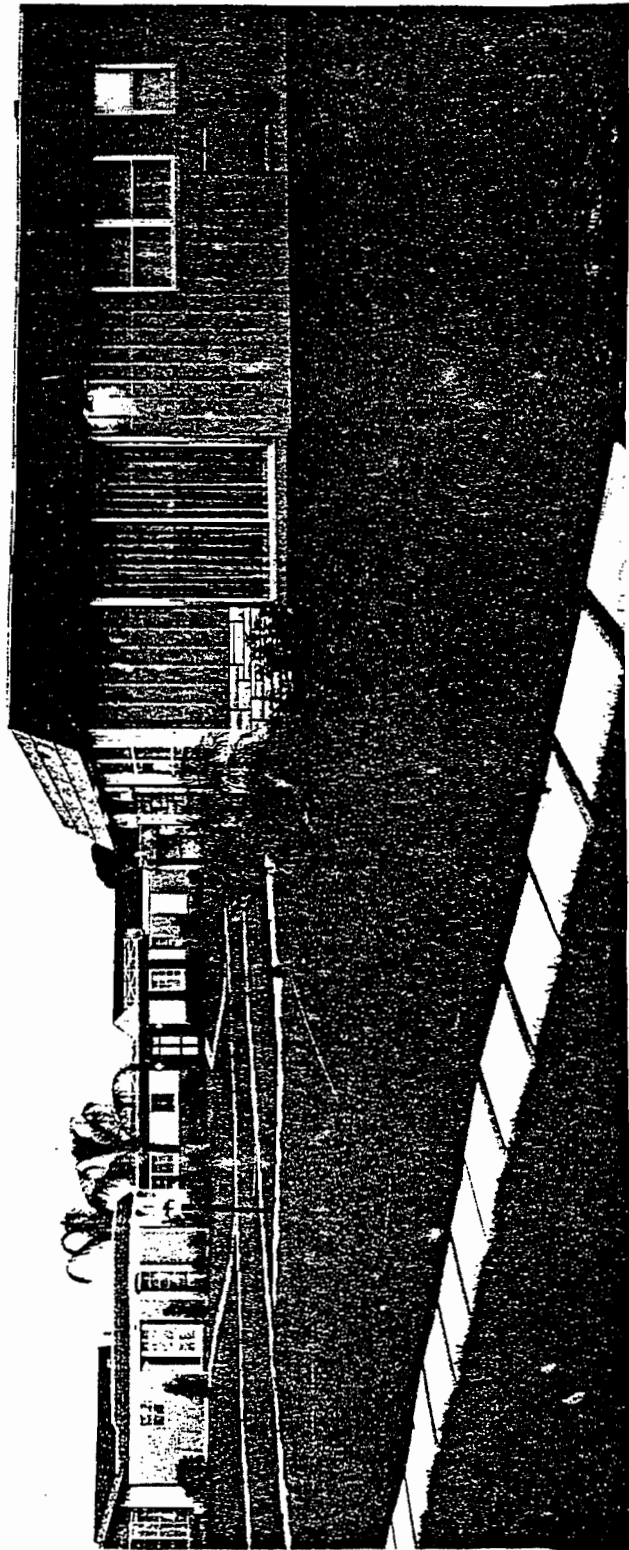


PHOTO: ARTHUR BERNHARDT

FIGURE 27: MOBILE HOME COMMUNITIES TODAY

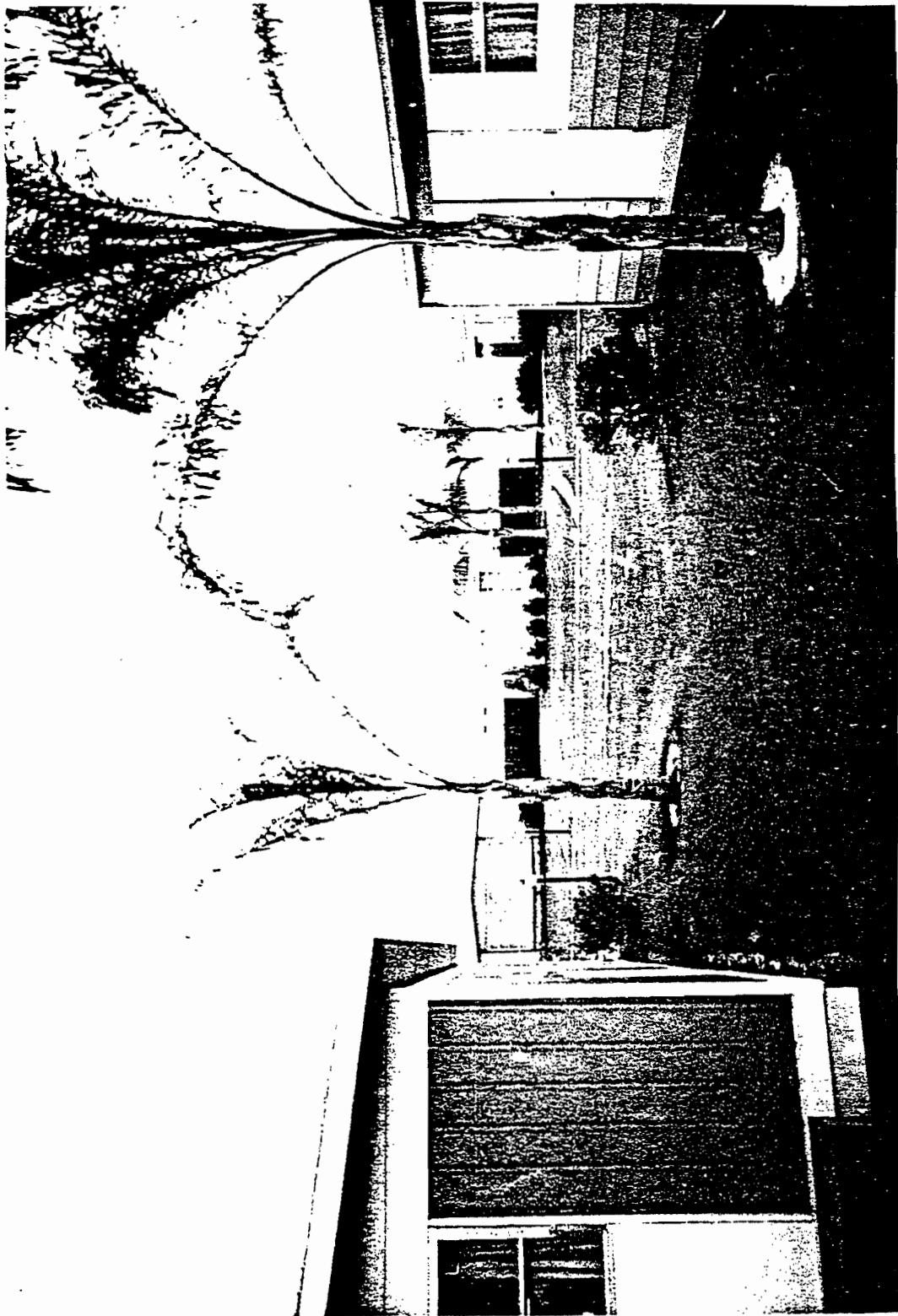


PHOTO: ARTHUR BERNHARDT

FIGURE 28: MOBILE HOME COMMUNITIES TODAY

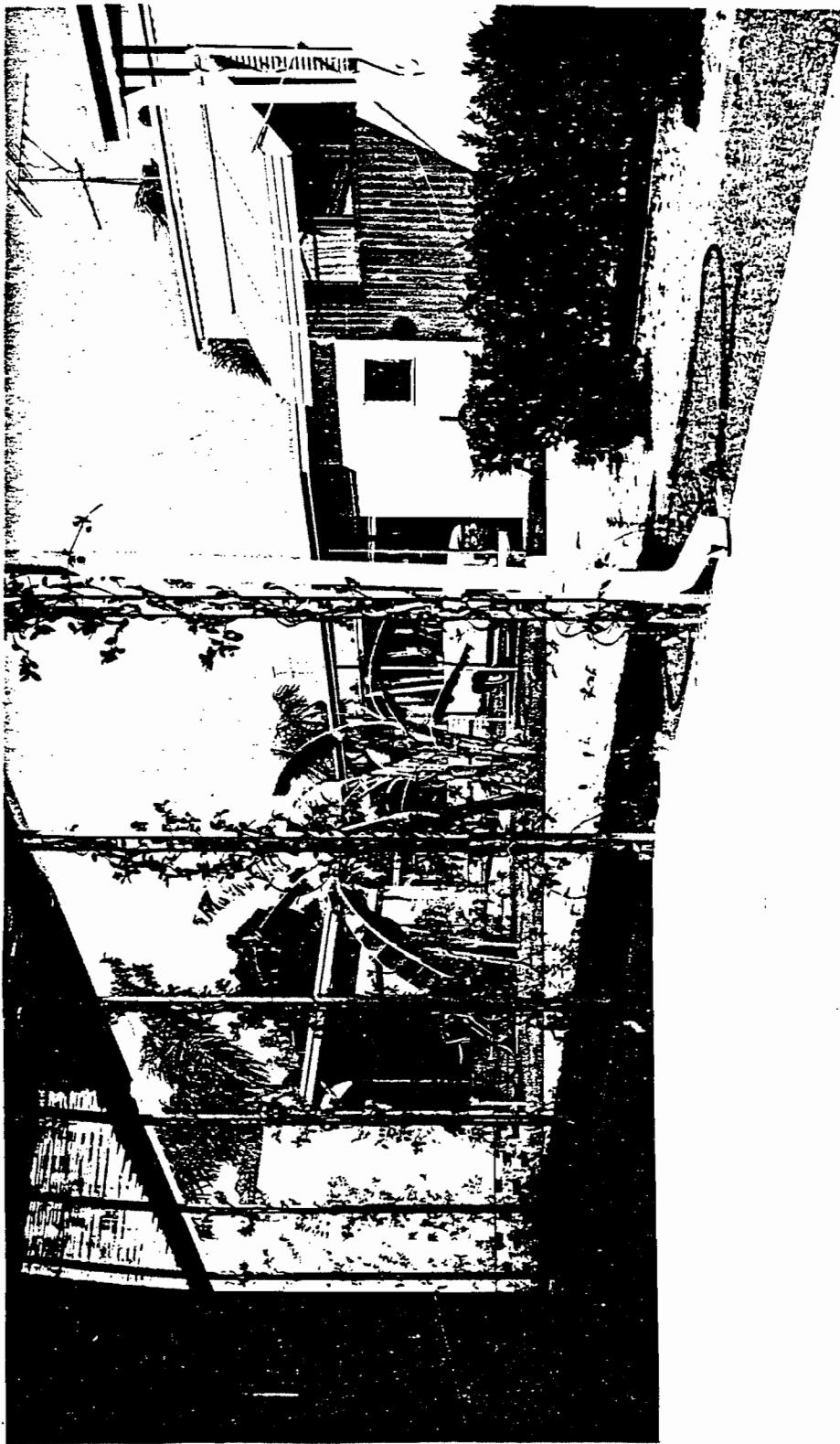


PHOTO: ARTHUR BERNHARDT

FIGURE 29: MOBILE HOME COMMUNITIES TODAY

2.3 PARK SIZE, DENSITY, LAND USE

The size of mobile home parks, their density, and land use patterns are important design parameters that affect the quality of life they provide. Park sizes have increased rapidly in recent years, and there has been a gradual decline in density to accommodate increasing numbers of large single-wide and double-wide mobile homes. Land uses in most parks are primarily residential, but some large highly-rated parks provide a wide variety of community facilities as well. Park size is a major factor in determining the feasibility of development, the amount of funds available for community facilities, and the sense of "neighborhood" or "place."

The average size of mobile home parks in 1970 was 75 spaces, but new parks planned or under construction in 1973 averaged almost 175 spaces. Quality parks rated 4 or 5 stars were almost twice as large (153 spaces average) as all other rated parks (Figure 30). As recently as 1958, average park size was only 36 spaces, and sizes have increased an average of 15% per year since that time (Figure 31). The extent of the increases shown on a regional basis in this figure can be compared to increases for each state shown in Figure 32. Florida has the largest parks, in all categories (all parks, quality parks, new parks). In every state, the quality parks are much larger than the other parks (Figure 33), and new parks tend to be larger than even the quality parks.

More important to park developers is the range of park sizes available within the state and in specific locations, because this provides an indication of the community facilities competitors can provide at a comparable rent level. California was selected to illustrate the distribution of park sizes because it has more "quality" parks than other states. The sample was limited to "quality" parks under the assumption that most developers would strive to build parks rated 4 or 5 stars. The sample indicates that park sizes in 1970 ranged from under 50 spaces to more than 400 spaces (Figure 34). Seventy-five percent of the parks were between 50 and 200 spaces, and more than one-fifth had less than 75 spaces - the U.S. national average in 1970. Only 15% were larger than 200 spaces. Community facilities for this sample are discussed in chapter 2.4.

Larger parks tend to command higher rentals, since they are generally newer and provide more community facilities. 91 of the parks responding to PMHI's Park Operator Survey identified rent levels (Figure 35) which were much higher for larger parks.

Park size was one of the major differences between parks included in one 1965 survey (Figure 36) and another 1972 survey (Figure 37). The 200 parks in the 1965 survey averaged 117 spaces and contained fewer community facilities than the 1972 survey of 220 quality parks (averaged 160 spaces). For example, only 15% of the parks surveyed in 1965 had a community building and pool, compared to 61% in the 1972 survey.

Average density for both samples was about 6 units per acre.

Park density is a second major design parameter that affects park quality. As density increases, the amount of usable open space is diminished and must be compensated for by additional privacy features.

Density trends in mobile home parks are significant. Current densities are typically around 5 to 7 units per acre, compared to about 10 units per acre for older parks. The demand for larger lots to accommodate double-wides and larger singles has made many older parks prematurely obsolete. The trend in industry sales is clearly toward larger units:

RANGE OF UNIT SIZES, 1973 SHIPMENTS

0.1	8', 10', 16' SINGLE-WIDES	
58.6	12' SINGLE-WIDES	(Decreasing Trend)
21.6	14' SINGLE-WIDES	(Increasing Trend)
19.7	EXPANDABLES/DOUBLE-WIDES	(Increasing Trend)

Source: MHMA Flash Facts, June, 1974

If this trend continues as projected, developers and park owners would benefit by reducing density even further to accommodate large units on most, if not all future sites. This trend may be halted by increases in land cost, in which case modifying the design of units to permit more successful medium-density siting in high cost areas will be required.

Responses from PMHI's Park Survey indicated a desire for larger lots

and lower densities. A similar pattern is found in conventional medium-density housing projects. The previously mentioned 1973 survey of 49 townhouse and condominium projects indicated a clear trend towards higher quality ratings in lower-density projects. Each of 1700 residents was asked to respond to two simple questions. One was unit-oriented: "Does this project provide good living conditions?" The other more directly related to the site: "Does this project provide a good environment?" Answers were averaged to provide a composite rating for the project as a whole (Figure 38). Dissatisfaction with the site was more common than with the unit, particularly for lower-cost projects. One high-density project (17 units per acre) received high ratings because of its relatively small size (52 units), attractive open surroundings (an ocean view and vacant land), and intensive development of its surroundings.

The average density of mobile home parks studied by PMHI,⁶ 6 units per acre, cannot be compared directly to the top-rated townhouse projects (which had the same average density). The quantity and quality of open space in mobile home parks and townhouses differ significantly, even at the same density. One-story units (mobile homes) cover a much higher proportion of available land than two- or three-story units (townhouses). Funds available for sitework, especially landscaping and privacy features, were much higher in the townhouse projects than in most mobile home parks. For this reason, many mobile home parks have some of the density-related problems identified in the townhouse projects which received lower quality ratings. This is particularly true in family parks with large numbers of children.

Density can be related to lot size in more specific terms. The general range of lot sizes found in single-family housing is shown in Figure 39. Efficient designs which provide little public open space will use about 10% of total land area for streets, walks, and community space. Inefficient designs, or designs which provide a large amount of open space and community facilities, use about 30% of land area for public use and yield smaller lots at the same density. Some designs fall outside this range at either end. The "typical" low-density project, single-family or mobile home park, will probably have 20% of its land area devoted to streets and public land. In such a "typical" project, a density of 6 units per acre will yield lots averaging just under 6,000 square feet. Subtracting the area occupied by the unit itself yields the usable yard area indicated by Figure 40. From this figure, it is apparent that double-wide units must be sited at about one unit-per-acre lower density than single-wide units to yield the same yard area.

Considering lot size in relation to unit size is important, but the quality of the space that is provided is a more effective measure of performance. In a typical park, windows of adjacent units face the only "yard" - the space between units - and privacy is achievable only by providing more space or landscaping than most mobile home owners can afford. The design and cost consequences of reducing density, within a range of 4 to 8 units per acre, is discussed in the section on Cost/Price Analysis. Intensive landscaping of the space between units can make all the difference between a successful and unsuccessful design. In rural areas, additional space can provide privacy at relatively low cost.

Expressing density in terms of people rather than houses is a more effective measure for evaluating the impact of proposed designs. Most density-related design problems, after all, are caused by and affect people. In terms of house density, the range for most low and medium density projects is shown in Figure 41. The mobile home density of about 6 units per acre compares to 3 units per acre for single-family units, about 8 units per acre for townhouses, and 20 units per acre for walk-up apartments. One relatively simple way to measure people density is to determine the number of bedrooms in a project, since family size and bedroom count are closely related. Figure 42 indicates that mobile homes typically have 12 to 15 bedrooms per acre, compared to about 9 for single-family units, 24 for townhouses, and 40 for walk-up apartments. This places the mobile home park in a people density-range that is close to conventional single-family projects, even though "house density" is twice as great.

Expressing "people density" in terms of children per acre provides an even more striking contrast between mobile homes and conventional housing. PMHI's estimate of the number of children per unit, based on 1970 census data and other surveys (in chapter 1.5, Occupant Profiles), indicates a low of 0.2 children per unit in adult parks and up to, or slightly above, 1 per unit in family parks. PMHI's estimated average of 0.7 per unit yields a children density of about 4 1/2 per acre, the same as for conventional singles with twice as many children per unit (Figure 43). This indicates that designing mobile home parks with children in mind is more important than most designers realize, particularly for parks outside of the retirement center states of California, Florida,

and Arizona. From the point of view of environmental impact, particularly on schools, the children density indicates that some family parks (as opposed to adult parks) may impact a community as much as a conventional single-family project. Townhouses, on the other hand, along with apartments, have roughly twice as many children per acre. Wherever possible, estimates of the number of children in existing area parks, similar to the proposed development, should be made to more effectively determine environmental impact.

Land-use patterns in mobile home parks indicate most are primarily residential, with community facilities limited to a laundry and community hall. Large highly-rated parks provide a wide complement of community facilities. As much as 20% of total land area can be devoted to non-residential use in quality parks. The function and scope of these facilities will be examined next.

THIS PAGE REPRESENTS PAGES 328 - 330, WHICH HAD THE
FOLLOWING COPYRIGHTED MATERIAL:

FIGURE 30: PARK SIZES

FIGURE 31: INCREASE IN PARK SIZE, RATED PARKS

FIGURE 32: AVERAGE PARK SIZE, # SPACES

FIGURE 33: # SPACES, AVERAGE SIZE
4/5 STAR PARKS COMPARED TO ALL PARKS, 1970

Woodall's Directory of Mobile Home Communities, 1971;
Woodall's Mobile Home and Park Directory, 1973, Woodall
Publishing Company, 500 Hyacinth Place, Highland Park,
Illinois 60035.

THIS SPACE REPRESENTS THE CHART ON PAGE 331, WHICH CONTAINED THE FOLLOWING COPYRIGHTED MATERIAL:

FIGURE 34: RANGE OF PARK SIZES, 1970
ALL CALIFORNIA 4/5 STAR PARKS

Woodall's Directory of Mobile Home Communities, 1971
Woodall's Mobile Home and Park Directory, 1973, Woodall
Publishing Company, 500 Hyacinth Place, Illinois 60035.

ITEM	RENT:	\$20-29	\$30-39	\$40-59	\$60-100
NUMBER OF PARKS		4	26	38	23
PERCENT OF TOTAL PARKS		4%	29%	42%	25%
AVERAGE # SPACES		26	53	93	215
SMALLEST PARK, # SPACES		16	6	13	44
LARGEST PARK, # SPACES		50	180	274	940

SOURCE: MIT/HUD SURVEY

FIGURE 35: AVERAGE RENTALS COMPARED TO PARK SIZE, 91 PARKS

THIS PAGE REPRESENTS PAGE 332, WHICH HAD THE FOLLOWING
COPYRIGHTED MATERIAL:

FIGURE 36: PARK PROFILE
200 MOBILE HOME PARKS, 1965

Mobile Home Park Survey, Mobile Home Park Management
Magazine, 1965.

THIS PAGE REPRESENTS PAGE 333, WHICH HAD THE FOLLOWING
COPYRIGHTED MATERIAL:

FIGURE 37: PARK PROFILE: 220 4/5 STAR PARKS, 1972

Weherly, Max, Mobile Home Parks, Part Two: An Analysis of
Communities, Urban Land Institute, 1972.

THIS PAGE REPRESENTS PAGE 334, WHICH HAD THE FOLLOWING
COPYRIGHTED MATERIAL:

FIGURE 38: DENSITY, PRICE, AND QUALITY RATINGS
49 CALIFORNIA / WASHINGTON, D.C. TOWNHOUSE PROJECTS

Carl Norcross, Townhouses and Condominiums, Urban Land Institute,
1973.

DENSITY UNITS PER ACRE	PUBLIC LAND (STREETS, SIDEWALKS, OPEN SPACE)		
	10% LAND AREA	20% LAND AREA	30% LAND AREA
3	13,070 SF LOT	11,615 SF LOT	10,165 SF LOT
4	9,800	8,710	7,620
5	7,840	6,970	6,100
6	5,535	5,810	5,080
7	5,600	4,980	4,355
8	4,900	4,355	3,810
9	4,355	3,872	3,390
10	3,920	3,485	3,050
TOTAL PRIVATE LAND AREA,	39,205 SF/ACRE	34,850 SF/ACRE	30,490 SF/ACRE

SOURCE: RANGE OF LAND AREA DEVOTED TO PUBLIC LAND BASED ON INSPECTION OF VARIOUS LOW-DENSITY SITE PLANS, CONVENTIONAL HOUSING.

FIGURE 39: DENSITY AND LOT SIZE

DENSITY UNITS PER ACRE	TYPICAL LOT	TYPICAL LOT	YARD AREA	YARD AREA
	SINGLE-WIDE	DOUBLE-WIDE	SINGLE-WIDE	DOUBLE-WIDE
3	116 x 100	155 x 75	10,895 SF	10,415 SF
4	87 x 100	116 x 75	7,990 SF	7,510 SF
5	70 x 100	93 x 75	6,250 SF	5,770 SF
6	58 x 100	78 x 75	5,090 SF	4,610 SF
7	50 x 100	66 x 75	4,260 SF	3,780 SF
8	44 x 100	58 x 75	3,635 SF	3,155 SF
9	39 x 100	52 x 75	3,152 SF	2,672 SF
10	35 x 100	46 x 75	2,765 SF	2,285 SF

SOURCE: LOT DEPTHS AND YARD AREAS BASED ON 12' x 60' SINGLE-WIDE UNITS AND 24' x 50' DOUBLE-WIDE UNITS

FIGURE 40: DENSITY AND LOT DIMENSIONS, YARD AREA
20% PUBLIC LAND

HOUSE TYPE	LOW	TYPICAL	HIGH
SINGLES	1	3	7
MOBILE HOMES	3	6	9
TOWNHOUSES	5	8	15
WALK-UP APARTMENTS	15	20	30

SOURCE: DIRECT OBSERVATION OF DESIGNS

FIGURE 41: "HOUSE DENSITY," UNITS PER ACRE

HOUSE TYPE	TYPICAL DENSITY	BEDROOMS PER UNIT	BEDROOMS PER ACRE
SINGLES	3 DU/AC	3	9
SINGLE-WIDE MOBILE	6 DU/AC	2	12
DOUBLE-WIDE MOBILE	5 DU/AC	3	15
TOWNHOUSES	8 DU/AC	3	24
WALK-UP APARTMENTS	20 DU/AC	2	40

SOURCE: BEDROOMS PER UNIT BASED ON DIRECT OBSERVATION OF 37 WASHINGTON AREA HOUSING PROJECTS FOR SALE, 1973 (14 SINGLES, 15 TOWNHOUSES, 8 APTS).

FIGURE 42: "PEOPLE DENSITY," BEDROOMS PER ACRE

HOUSE TYPE	TYPICAL DENSITY	CHILDREN PER UNIT	CHILDREN PER ACRE
SINGLE FAMILY	3 DU/AC	1.5	4.5
MOBILE HOMES	6 DU/AC	0.75	4.8 (FAMILY PARKS)
TOWNHOUSES	8 DU/AC	1.0	8
WALK-UP APARTMENTS	20 DU/AC	0.5	10

SOURCE: CHILDREN PER UNIT FOR TOWNHOUSES BASED ON ULI STUDY, 1700 RESIDENTS. CHILDREN PER UNIT FOR OTHER HOUSE TYPES ESTIMATED BASED ON BEDROOMS.

FIGURE 43: "PEOPLE DENSITY," CHILDREN PER ACRE

2.4 COMMUNITY FACILITIES

Community facilities play an important role in most mobile home parks, particularly those located in isolated areas. As social centers, they provide a focal point for group activities, even if the facilities are limited to a laundry and a small pool. The lack of outdoor privacy found in many parks makes informal encounters more likely, and this contributes to the small-town atmosphere many families consider an advantage of mobile home living. The emphasis placed on community facilities varies. Retirement-oriented adult parks generally offer more facilities and higher-quality features than family or student parks. Higher occupant incomes in some of the retirement parks make a large complement of facilities more feasible, but the main factor is probably greater need for group activity and the higher proportion of time senior citizens spend at home. In many of the adult parks more features are provided than in conventional moderate-income projects of the same size.

A survey of 775 mobile home families in 1965 indicated that almost 60% preferred a basic park to one with a pool, clubhouse, and recreation facilities, considering costs. Only 30% of these families were willing to pay \$5-10 per month more to have such features.³ This reflects the emphasis placed on economy by many young families, but it does not necessarily mean that such families do not seek group activity.

Features oriented towards children, such as landscaped play or recreation space and privacy features near each unit, would appeal more to families with children and generally cost less. Very few quality parks advertise such features in Woodall's directory.

The cost of providing community facilities is discussed below, in the Section on Cost/Price Analysis. Increasing the number and scope of community facilities becomes feasible as park size increases, since costs per space will be lower. However, for many features, such as landscaping and privacy fencing, the cost does not significantly decrease as the park grows in size.

Woodall's directory does not identify all of the community facilities provided in mobile home parks. Community halls and laundry facilities are listed, but other facilities can only be estimated from advertisements placed by selected parks. PMHI estimated the number of features provided in the 516 California parks and 55 Arizona parks rated 4 or 5 stars in 1970 (Figure 44). Almost all of these parks advertised community halls and a laundry, and 19-25% advertised a pool. Some large parks advertised golf courses. Other features advertised were cable television, a beach or a lake, car wash, restaurants, gym, saunas, and tennis courts. The distribution of community facilities by park size in California (Figure 45) indicated that small

parcs were almost as likely to have pools as were larger ones. Of course, parks which had low vacancy rates did not need to place advertisements in the directory, so these figures are not an accurate count for the entire sample.

A more limited sample of 200 quality-rated parks surveyed by the Urban Land Institute in 1972 provides a more accurate picture of community facilities. 61% of these parks had pools, 22% playgrounds, 16% had a lake or waterfront, 11% a sauna, and 8% a golf course, in addition to the almost universal laundry and community hall. An average of 20% of total land area was devoted to community facilities.⁵ Although these figures are much higher than those shown for the larger California/Arizona sample, the parks were primarily oriented toward retirees (70% were adults-only). Family parks would yield lower figures.

The quality of community facilities provided could not be addressed during site visits -- such an evaluation was beyond the scope of this study.

PMHI's analysis indicates the need to identify occupant groups and park quality/rent objectives early in the design process, as prerequisites for an accurate evaluation of the need for and scope of community facilities. In family parks, in particular, the optimum community facilities blend may well differ considerably from the norm for other parks in the area.

THIS SPACE REPRESENTS THE FOLLOWING COPYRIGHTED MATERIAL:

FIGURE 44: COMMUNITY FACILITIES ADVERTISED, 1970
516 CALIFORNIA 4/5 STAR PARKS, 55 ARIZONA 4/5 STAR PARKS

Woodall's Directory of Mobile Home Communities, 1971

Woodall's Mobile Home and Park Directory, 1973.

PARK SIZE # SPACES	LAUNDRY BUILDING	COMMUNITY HALL	POOLS 1 OR MORE	GOLF 3-PAR OR LARGER
Under 50	100%	83%	13%	0%
51-75	100%	96%	16%	0%
76-100	100%	100%	13%	0%
101-125	100%	98%	18%	0%
126-150	100%	100%	24%	0%
151-175	100%	100%	26%	0%
176-200	100%	100%	18%	2%
201-300	100%	100%	14%	2%
301-400	100%	100%	32%	13%
401 and up	100%	100%	28%	14%
AVERAGE, CALIF	100%	98%	19%	1%

FIGURE 45: COMMUNITY FACILITIES ADVERTISED, 1970
COMPARISON BY PARK SIZE, 516 CALIFORNIA 4/5 STAR PARKS

2.5 STREET AND LOT PATTERNS

Street and lot patterns in most mobile home parks are similar to those in conventional linear single-family subdivisions, except that densities are higher, lots are smaller, and the units differ considerably from conventional housing in appearance and their relationship to the site. The function of outdoor space is compromised by the independent design of mobile homes and mobile home sites, as well as the economic restraints imposed by shipping dimensions. Cluster site plans, "zero-lot-line" designs with windows of only one unit facing the side yard, and other innovations are beginning to emerge in industry attempts to improve site plans.

A typical cul-de-sac is shown in Figure 46; a design based predominantly on cul-de-sacs is shown in Figure 47. Both designs illustrate the relatively narrow but deep lots found in most mobile home parks. The long and narrow shape of single-wide mobile homes has had significant impact on park designs. Entrances to such units usually face the sideyard, rather than the street, although entrances for double-wides vary more. Turning homes parallel to the street more clearly defines the entrance (Figure 48), but it also increases street frontage and cost. The pattern of relatively deep, narrow lots, perpendicular or angled to the street, is most common (Figures 49 to 51).

The narrow lot reduces the space between units. The average yard width reported in a survey of 220 quality parks, rated 4 or 5 stars, was 17 feet between units; the range was 12 to 30 feet average.⁵ Without landscaping, sideyards this small are hardly usable and achieving privacy outdoors is virtually impossible. The sideyard serves as the only outdoor space available to mobile home families; front and back yards typically do not exist. Designs proposed in Figures 52 to 56 illustrate several approaches to creating privacy, particularly in the area of patios.

Landscaping is not the only element available to create privacy between units in narrow lots. "Zero-lot-line" approaches to unit design create privacy with a blank sidewall on one side of the unit, or at least a wall with high windows (Figures 57 to 59). In such designs, the space between units "belongs" entirely to one unit and is much more usable. This design approach is now quite common in California single-family and townhouse units but has not yet been realized in mobile home designs.

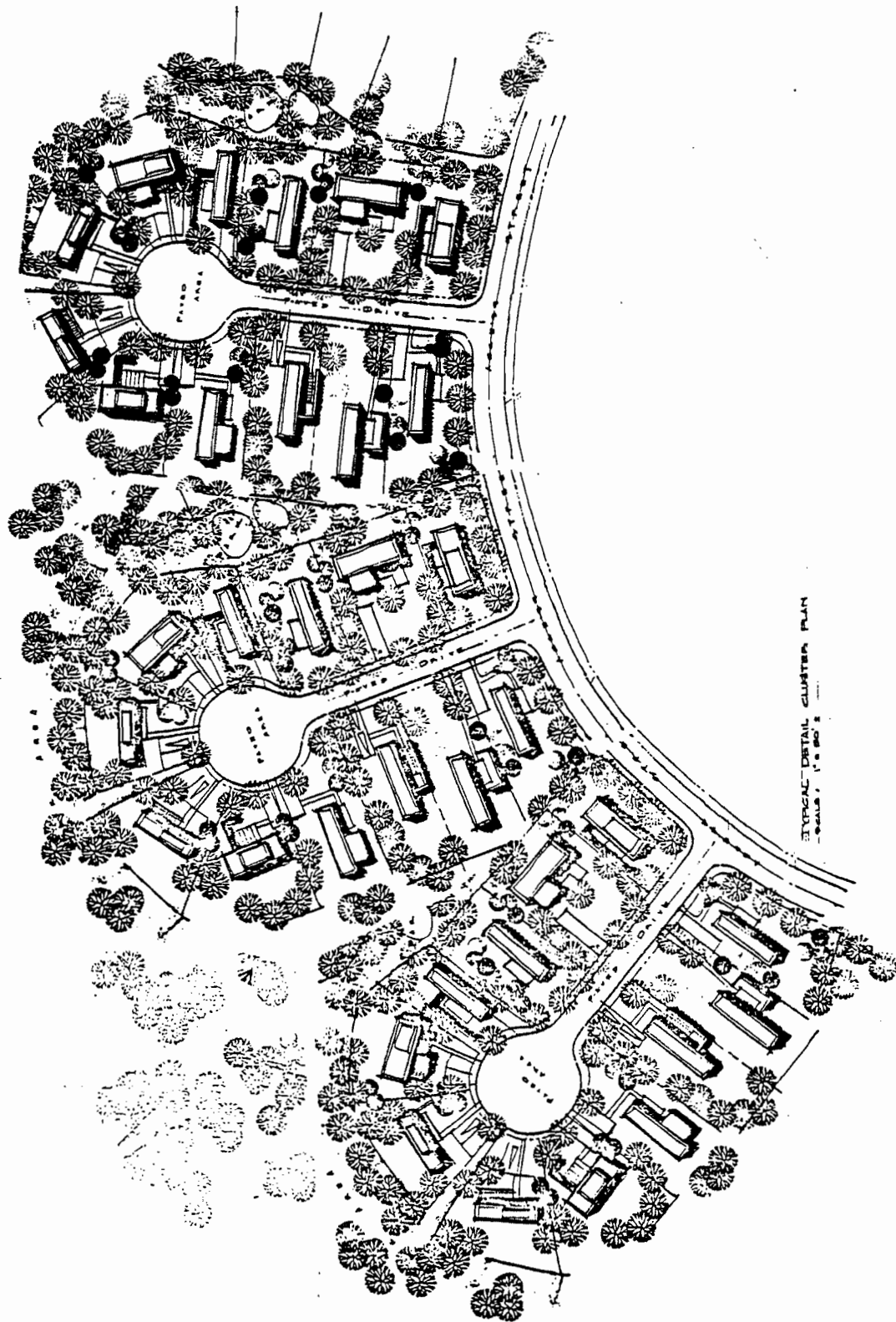
Other design innovations proposed in a recent industry competition sponsored by a manufacturer of siding were aimed at relating the unit more closely to the site and relieving the monotony of look-alike units. The designs proposed in the competition go several steps beyond the state-of-the-art in relating unit designs to each other, to accessories, and to the site (Figures 59 to 67). Some projects which

have been built utilizing this approach are successful.

Designs such as these, which focus on improvements in function as well as appearance of outdoor space, would significantly improve the image of the industry. Most of those shown could only be built at higher cost than current mobile home designs. However, the feeling of enclosure and the inward-looking effect of existing unit designs can be overcome without necessarily adding all of the features indicated in the competition designs.

In addition to a lack of privacy, variety, and functional outdoor spaces, many parks provide marginal parking space and street widths. Off-street parking, at least for occupants, is preferred by most mobile home families. Responses to PMHI's Park Survey indicated that 86% of occupant cars were parked off-street, as well as 59% of visitors' cars. Most parks provided 2 car spaces per lot (Figure 68). Clustered parking, while sometimes more economical, is provided less often for occupant spaces in new parks.

Within the restraints currently imposed on park designers, the overall quality of the best new parks is surprisingly high. The independent design of unit and site remains the major restraint to improved performance. As the popularity of mobile home subdivisions increases and more manufacturers produce units that reflect potential site conditions, this restraint will gradually disappear.



TYPICAL DETAIL CLUSTER PLAN
SCALE: 1" = 20'

FIGURE 46: SITE PLAN

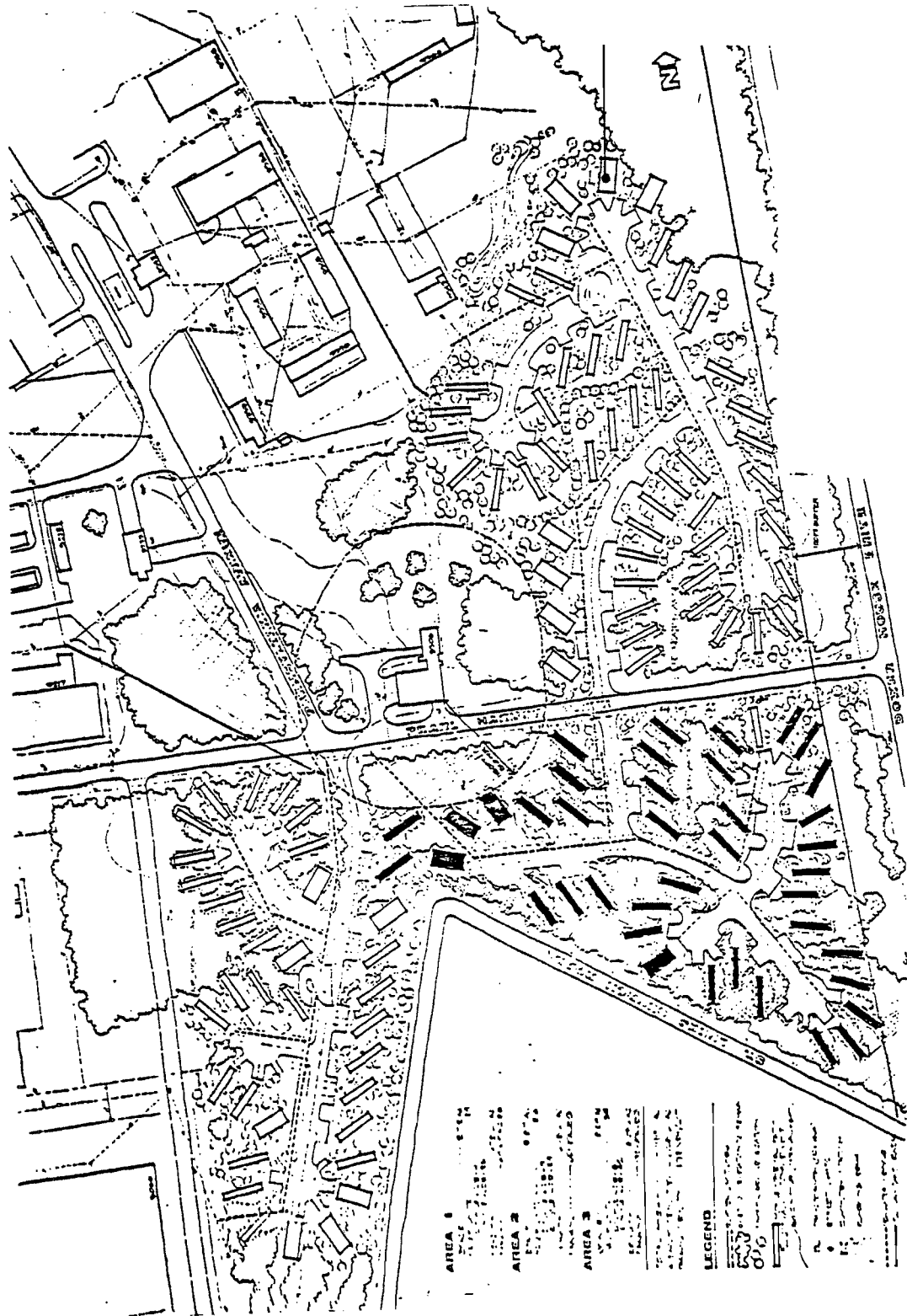


FIGURE 47: SITE PLAN

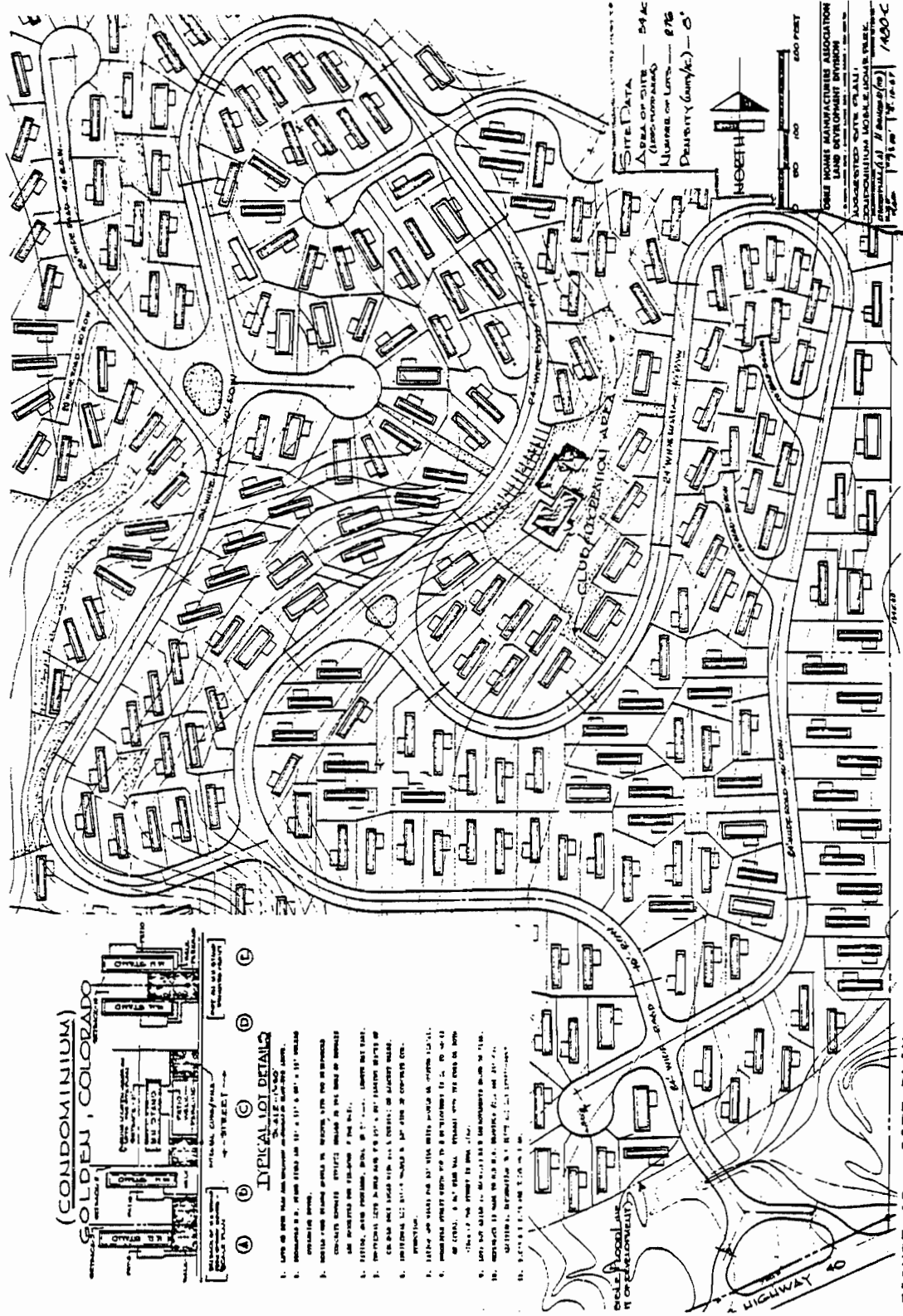


FIGURE 48: SITE PLAN

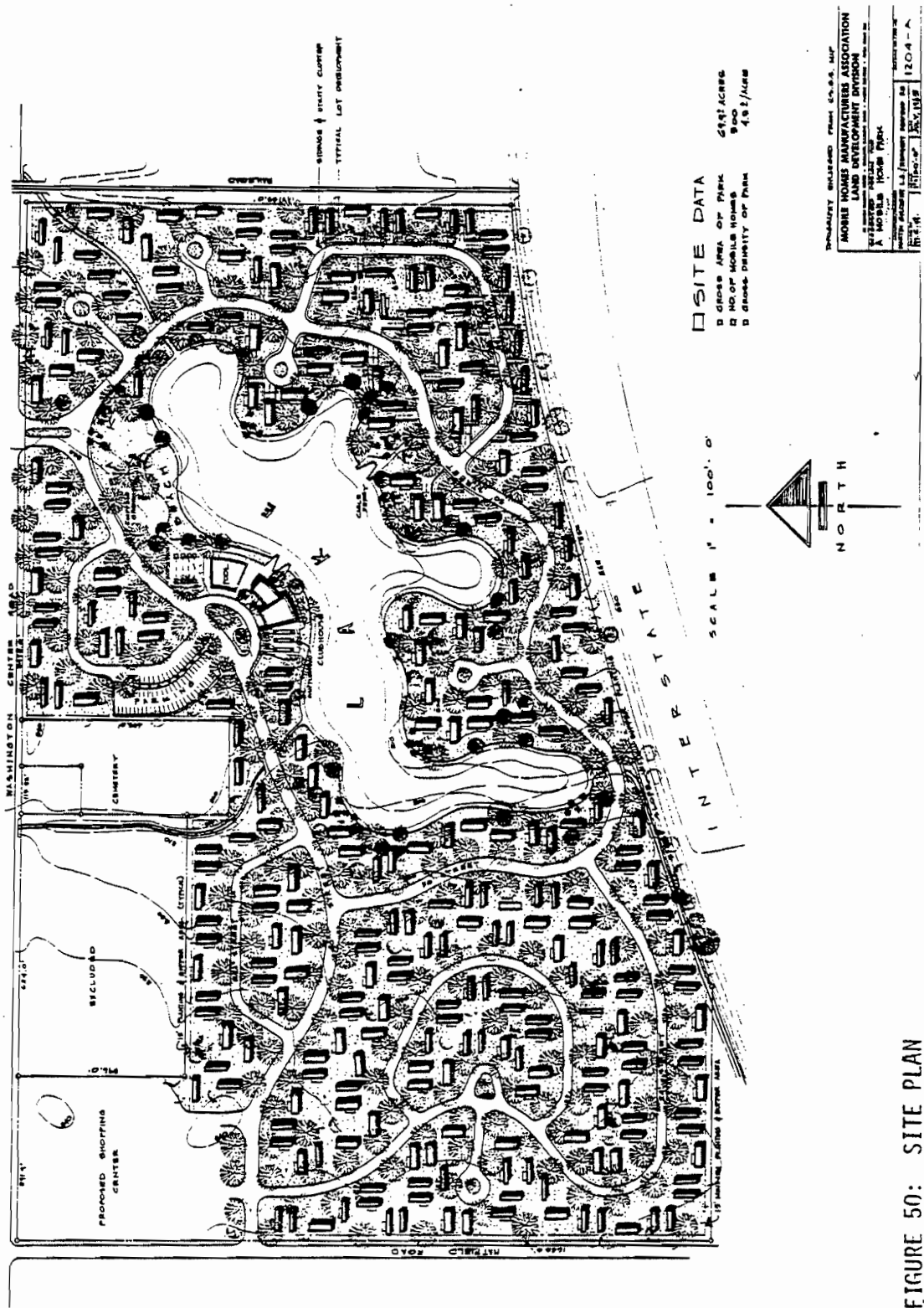


FIGURE 50: SITE PLAN

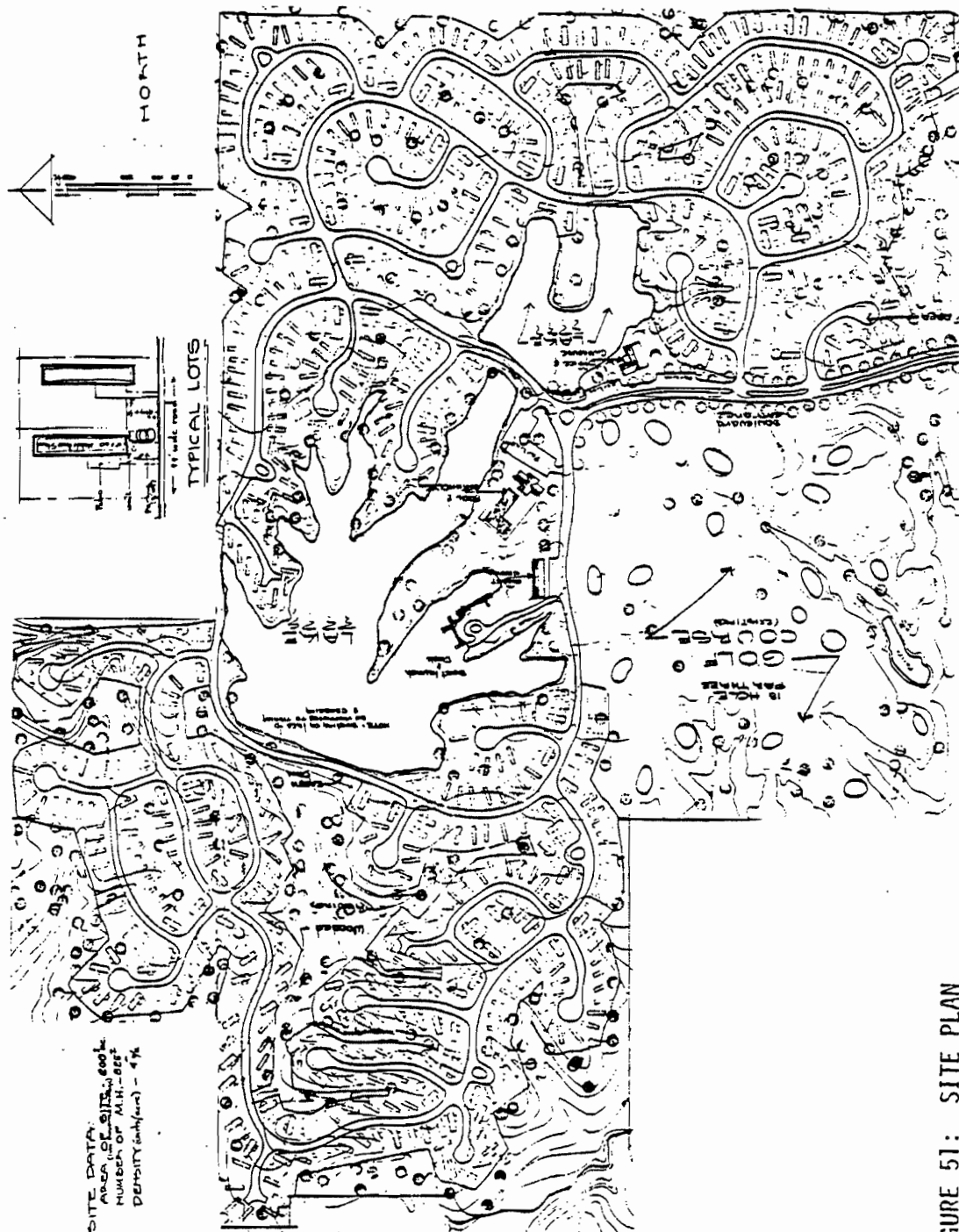
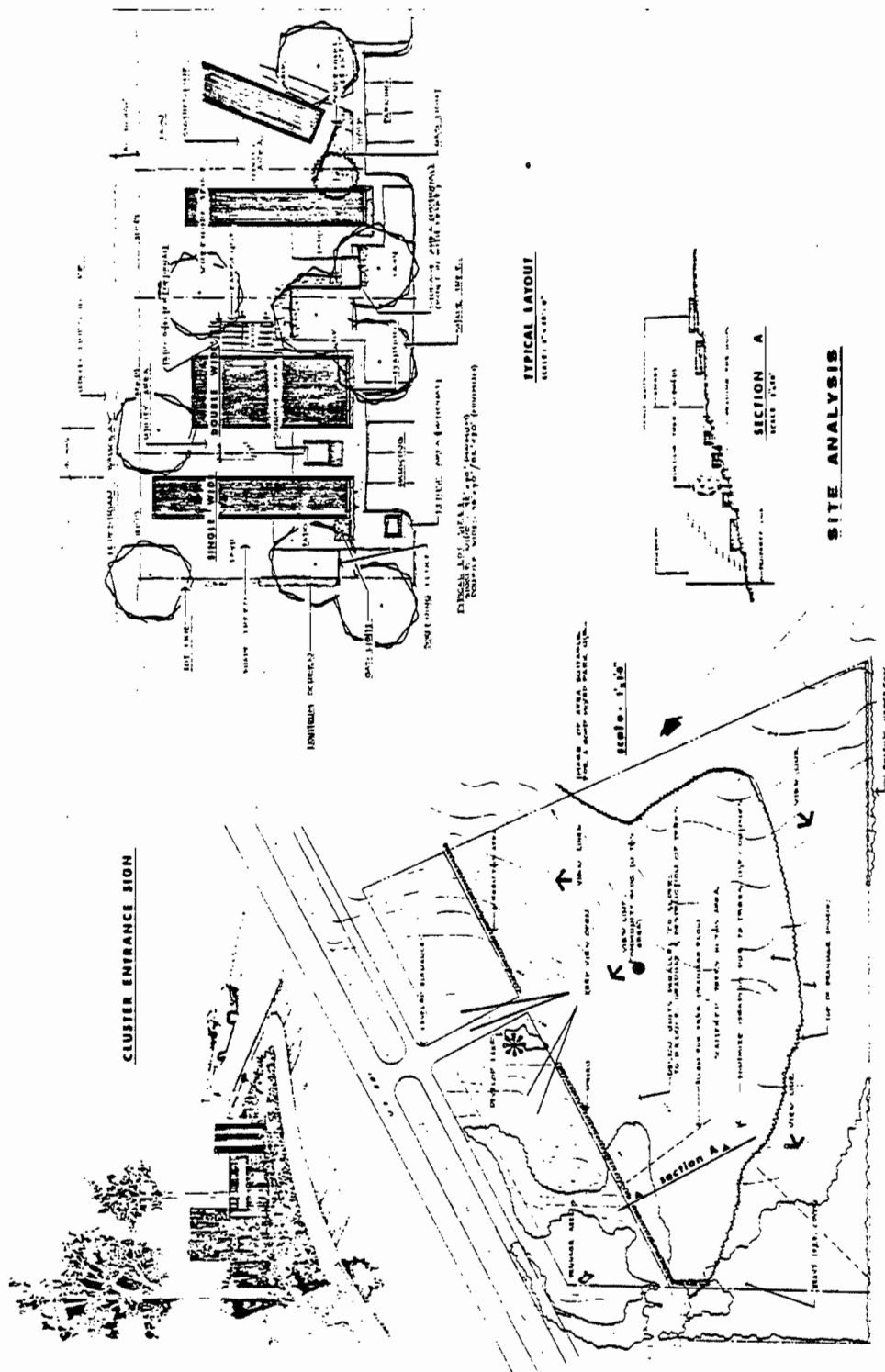


FIGURE 51: SITE PLAN



MOBILE HOME MANUFACTURERS ASSOC.
 CHICAGO, ILLINOIS
 GEORGE R. HUNT S.A.
 H. HENNING P.E.

M. SACREY PROPERTIES INC.
 SAN ANTONIO, TEXAS 78230

FIGURE 52: LOT LAYOUT: ALTERNATIVES

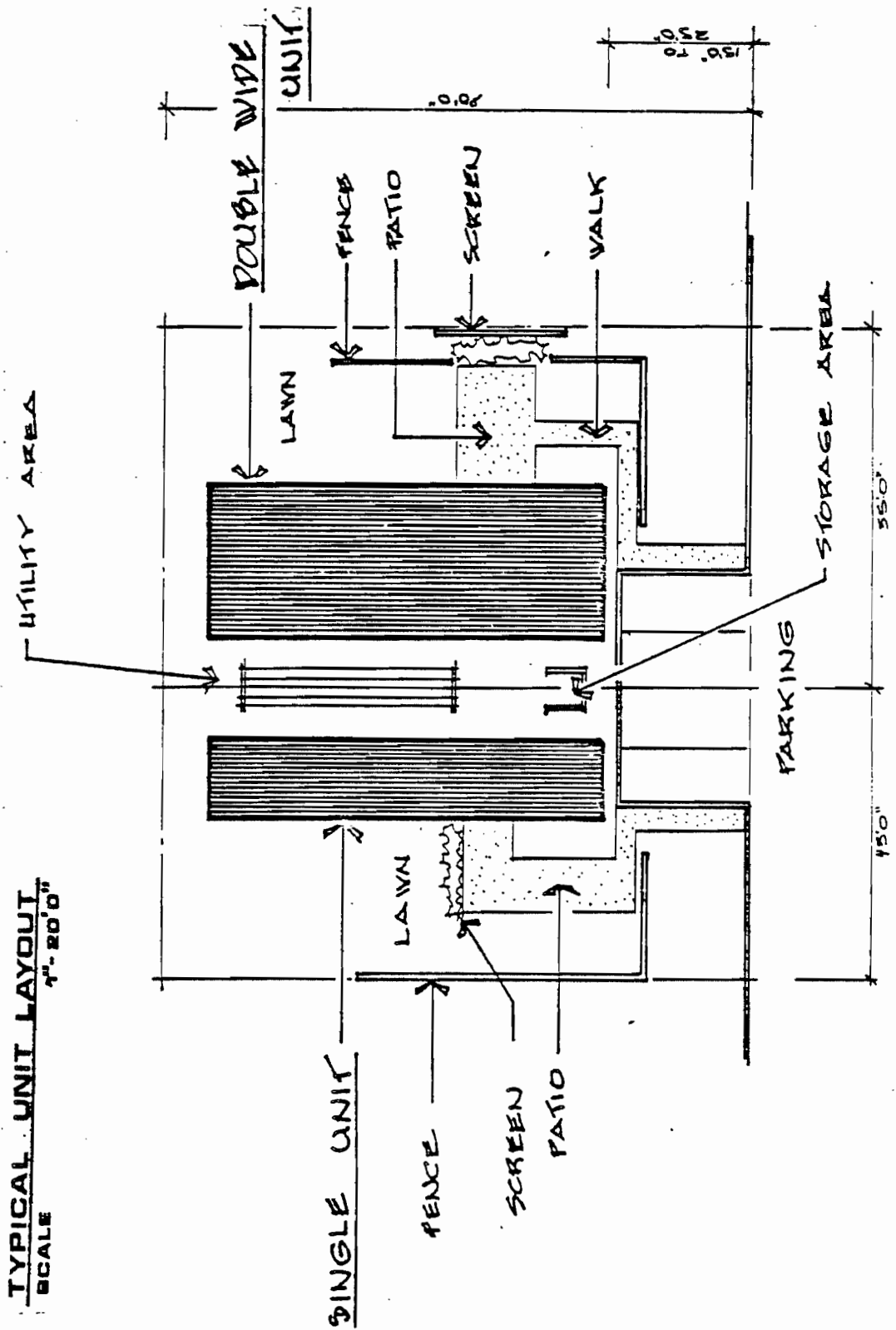


FIGURE 53: LOT LAYOUT: ALTERNATIVES

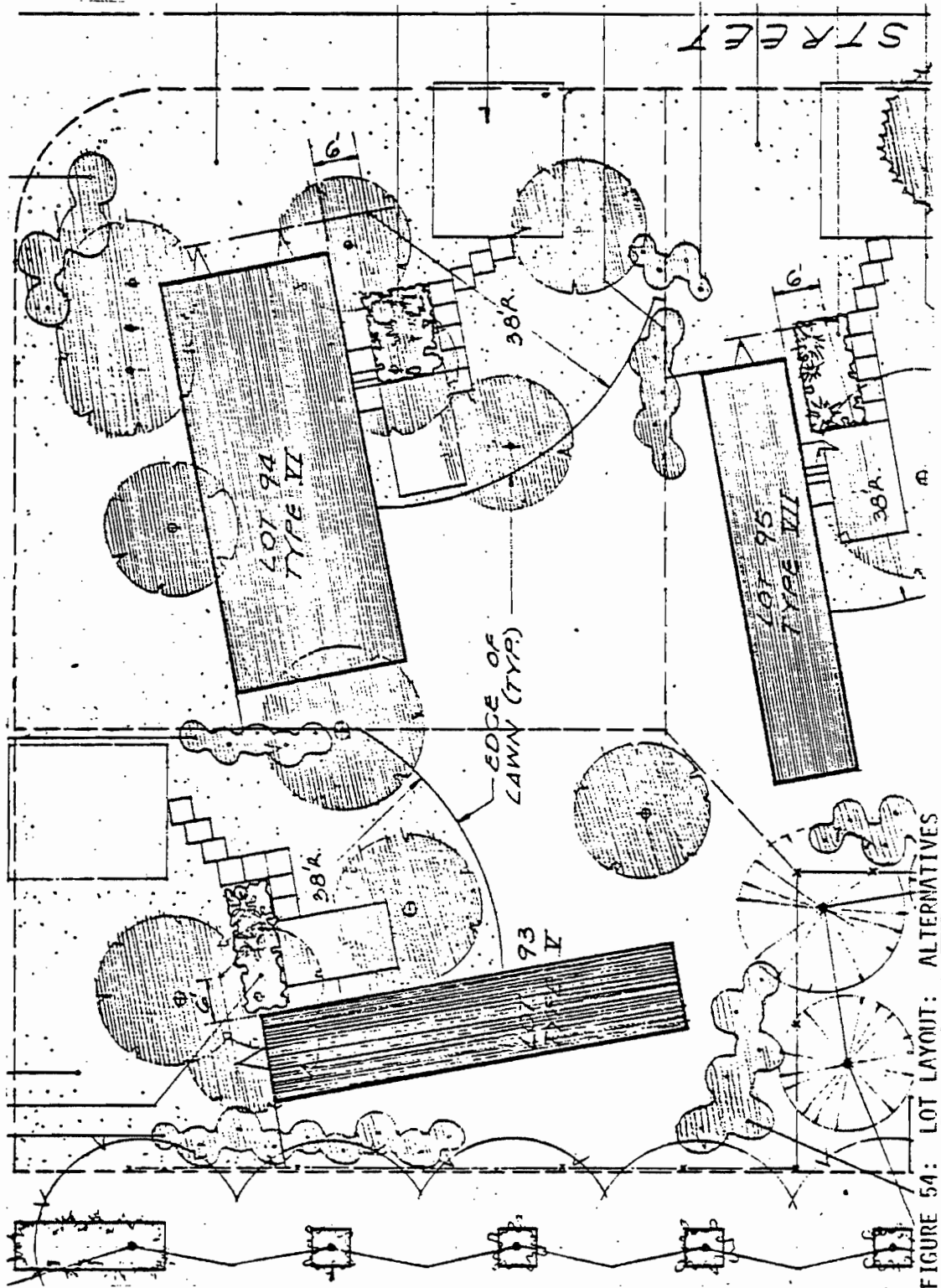


FIGURE 54: LOT LAYOUT: ALTERNATIVES

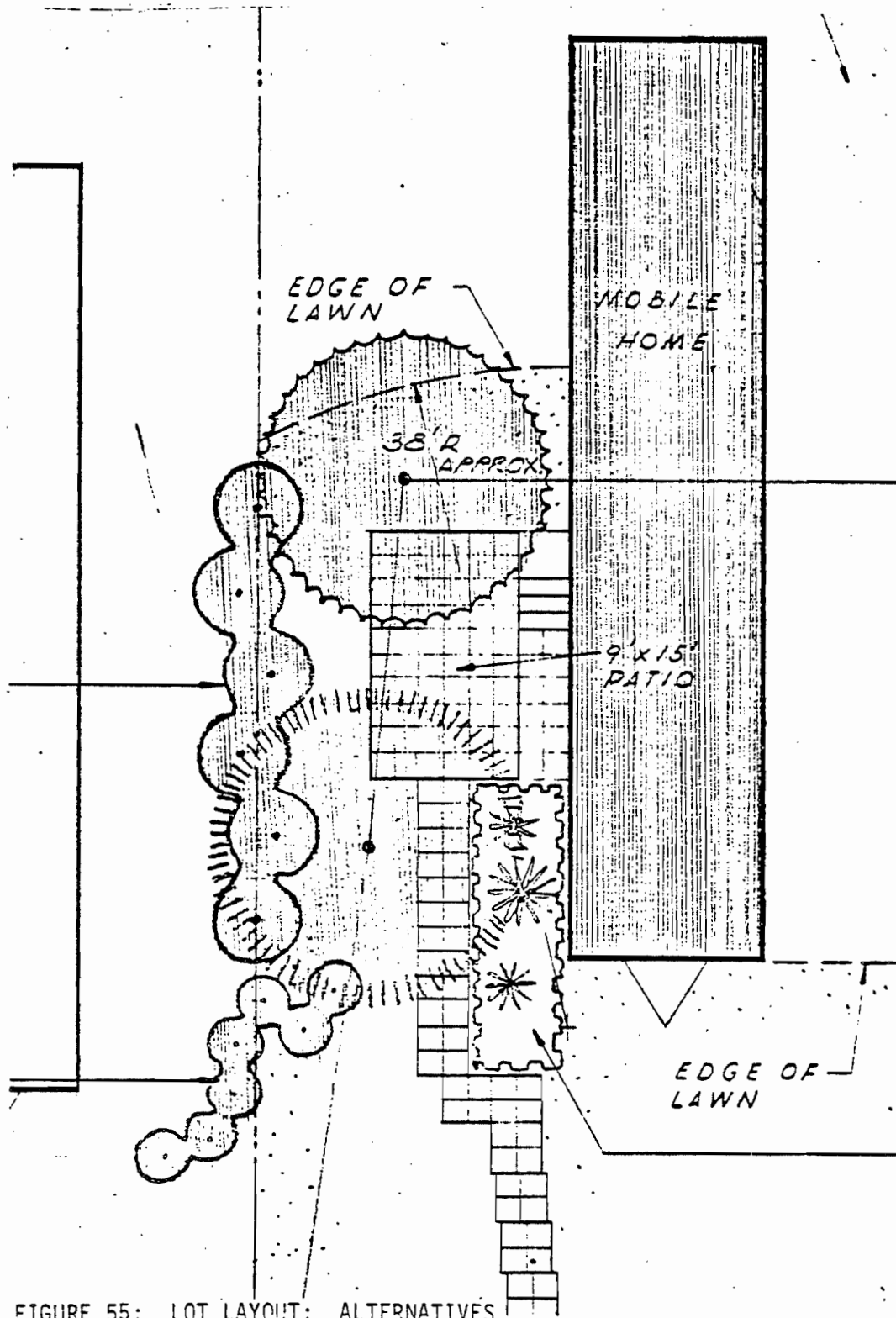


FIGURE 55: LOT LAYOUT: ALTERNATIVES

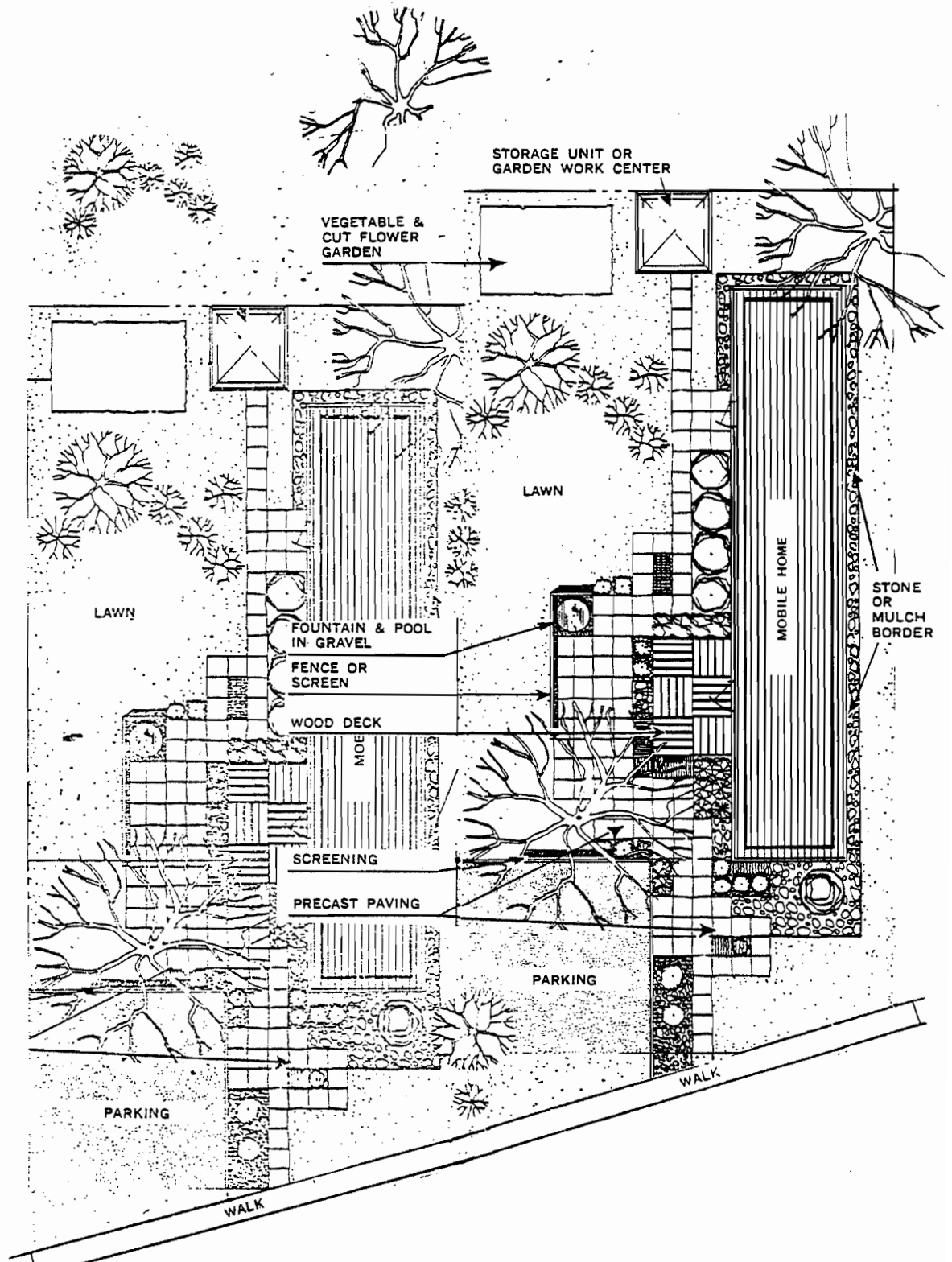


FIGURE 56: LOT LAYOUT: ALTERNATIVES

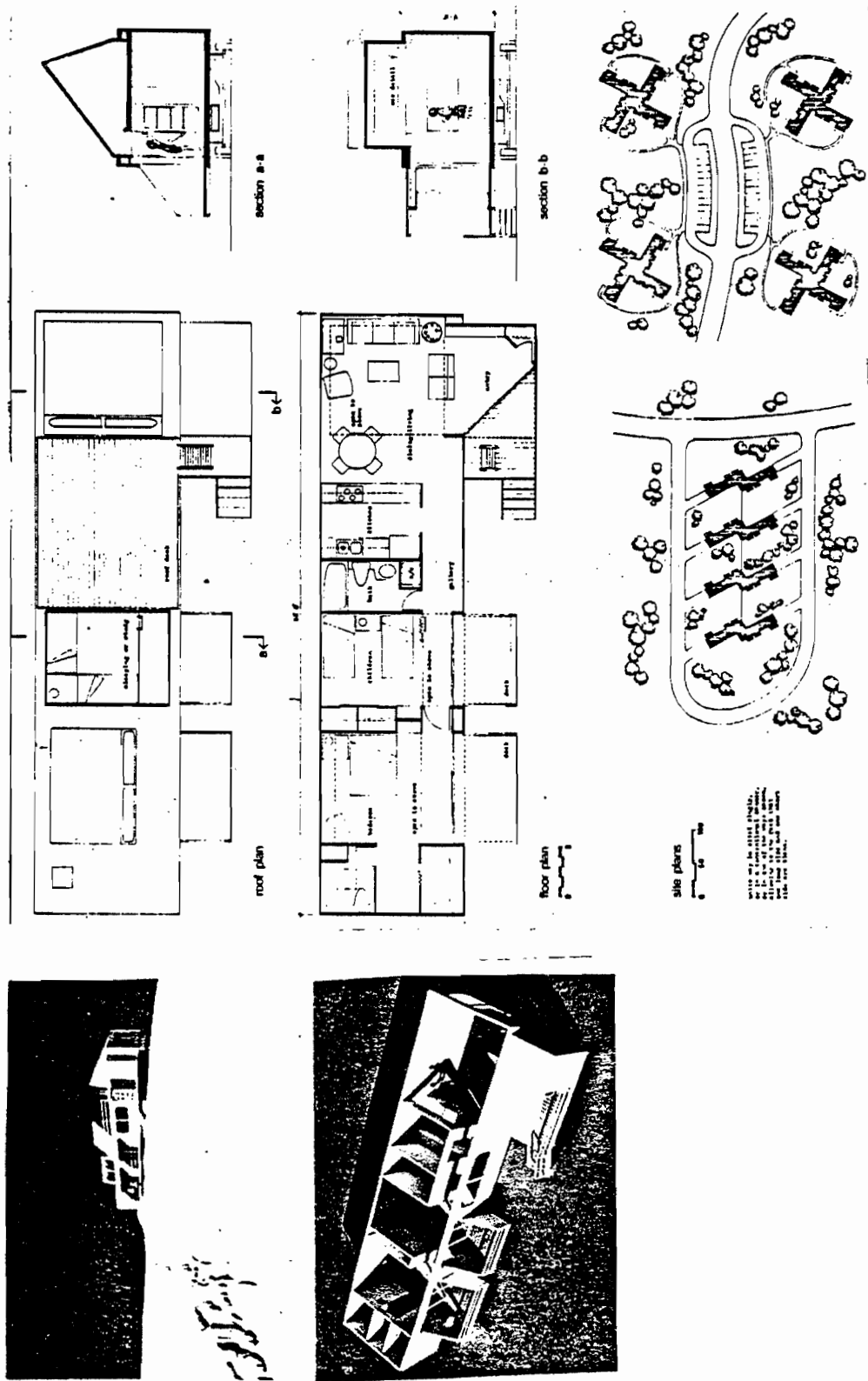


FIGURE 57: LOT AND UNIT DESIGN: INTEGRATION

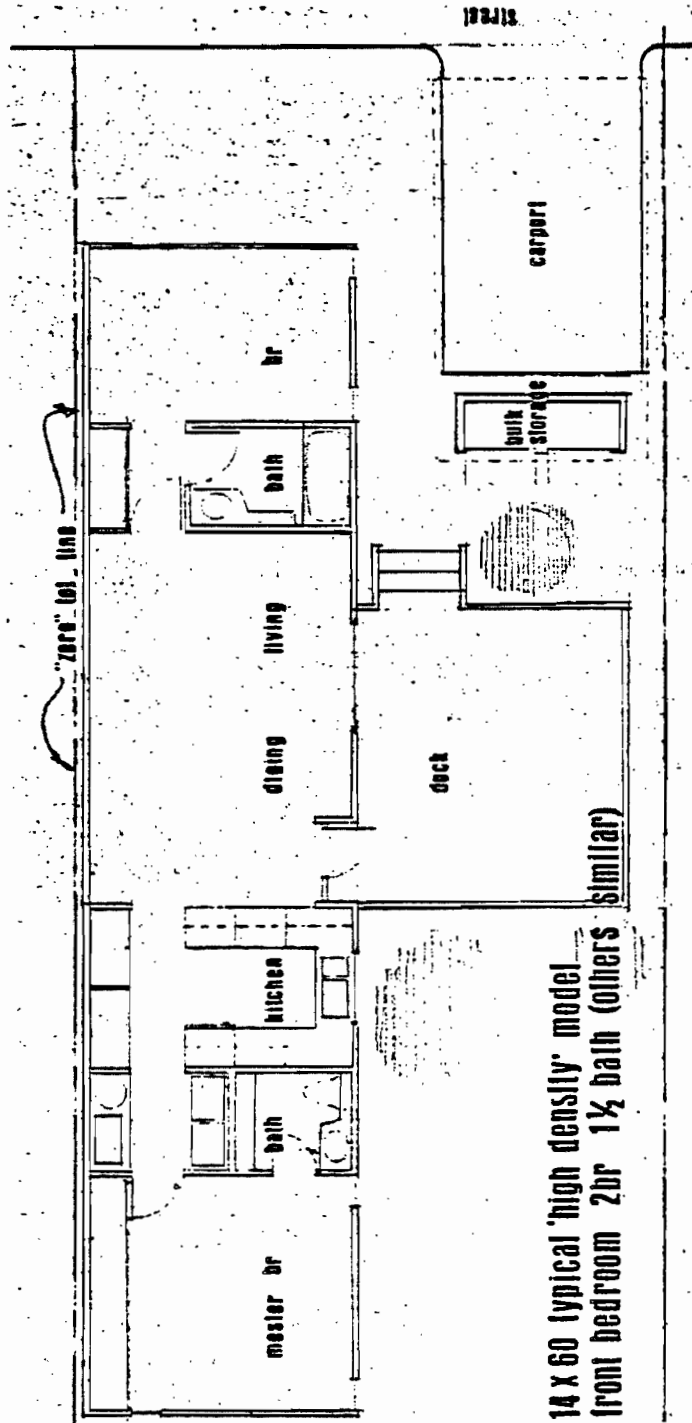


FIGURE 58: LOT AND UNIT DESIGN: INTEGRATION

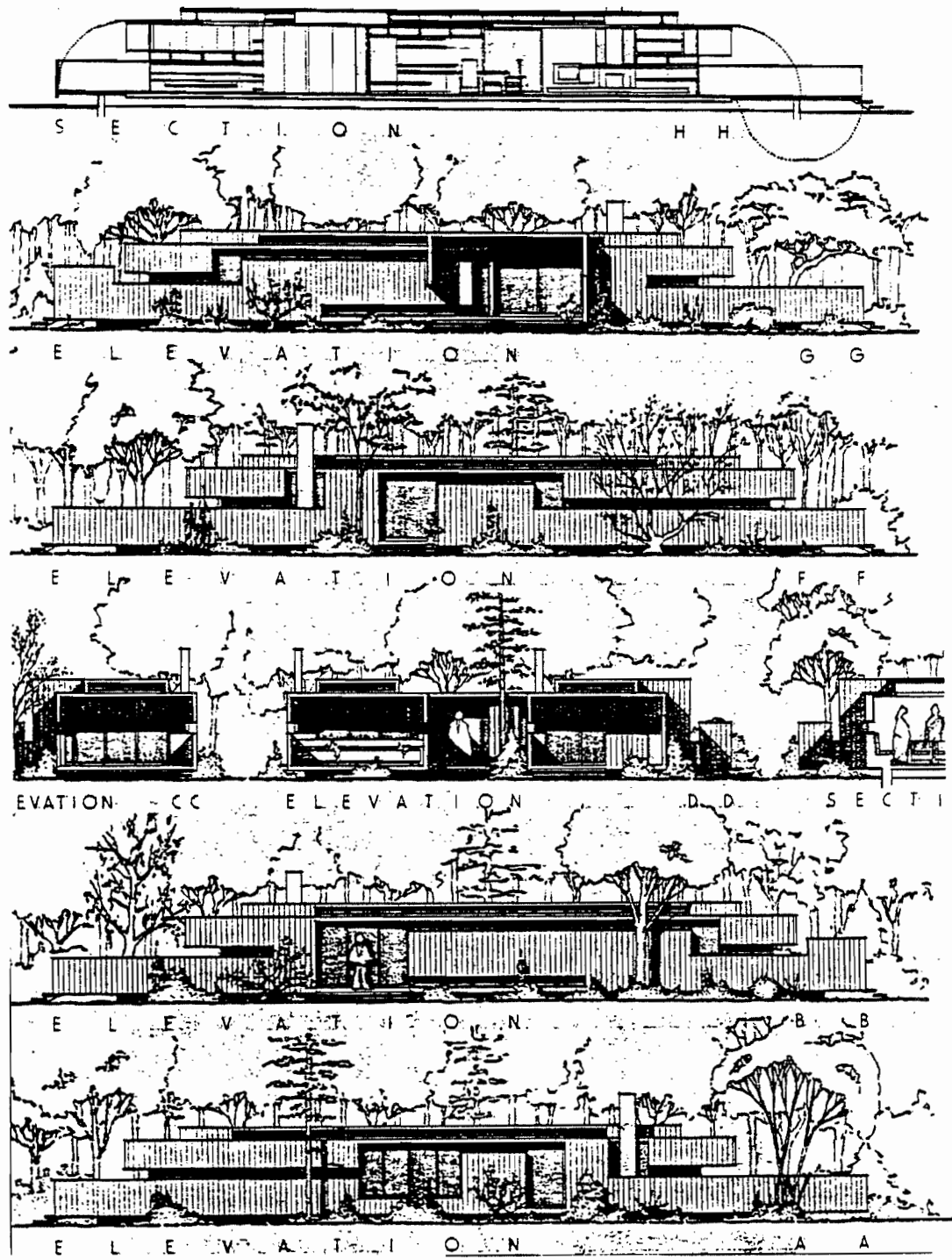


FIGURE 59: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

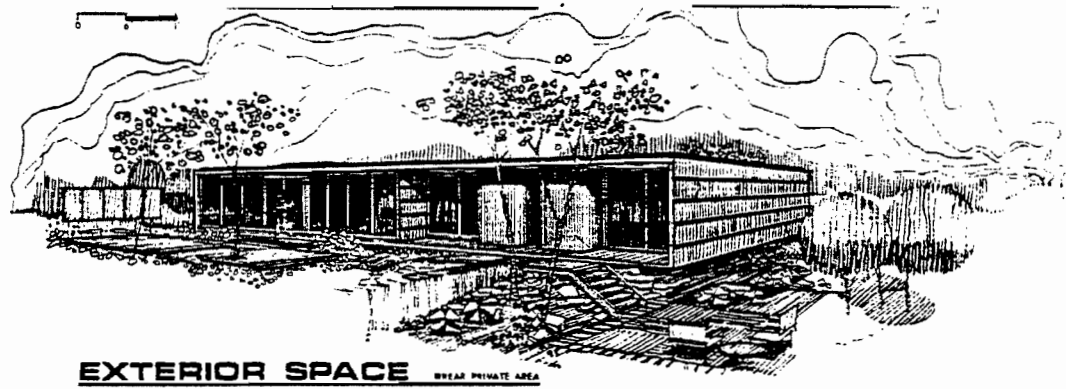
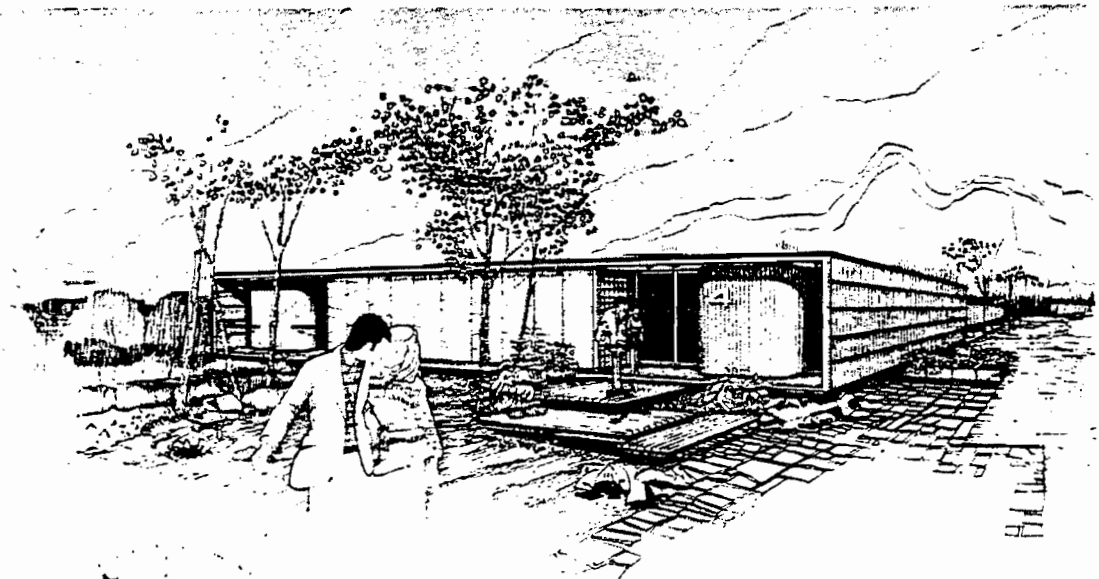
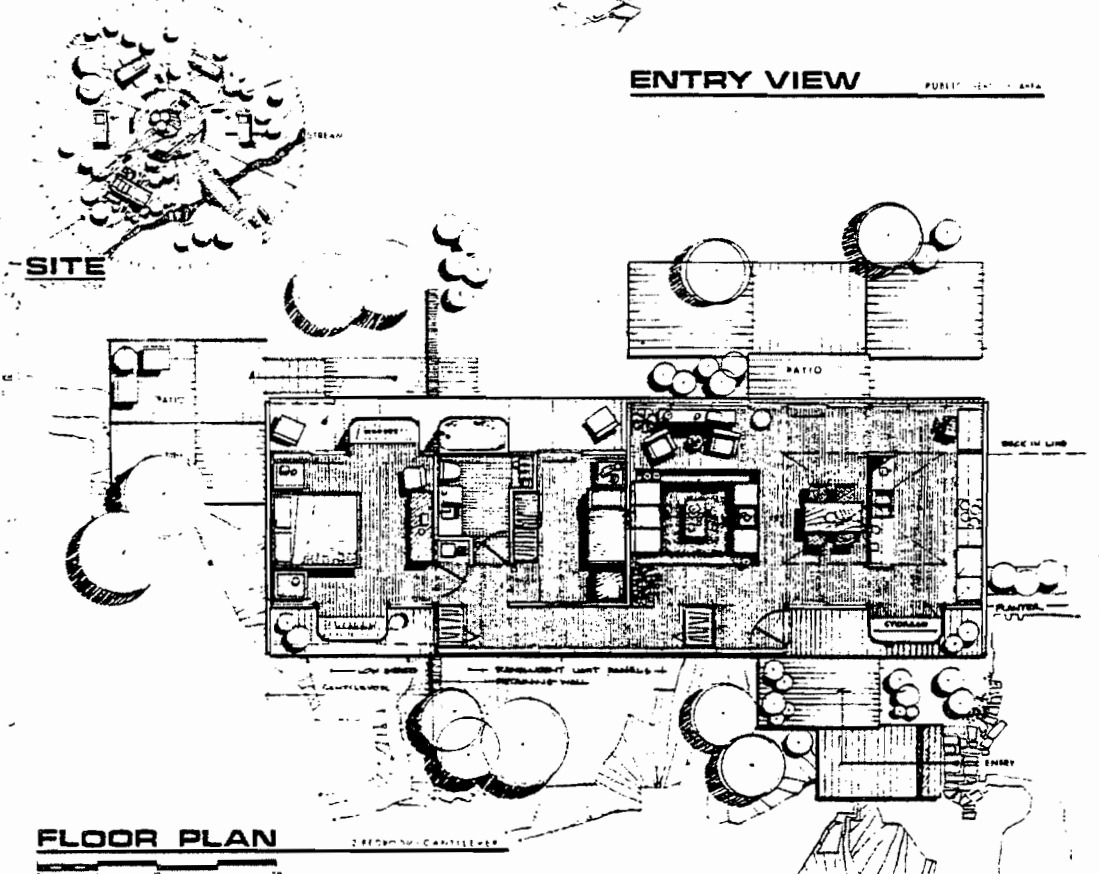


FIGURE 60: UNIT DESIGN: SITE PLANNING AS A DETERMINANT



ENTRY VIEW

PURVIS - 1967 - 10-14-67



FLOOR PLAN

2 ROOMS - CASTLEVIEW

FIGURE 61: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

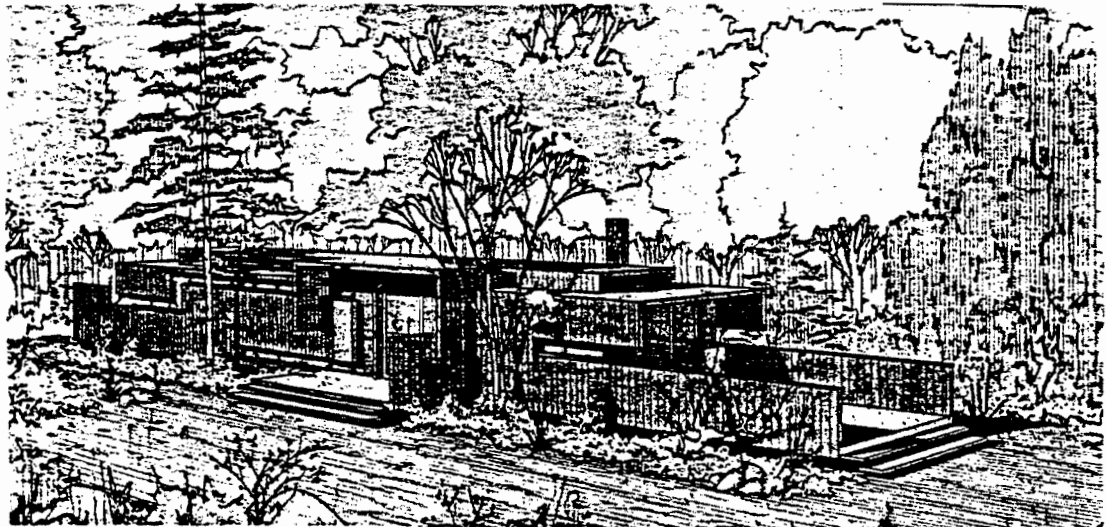


FIGURE 62: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

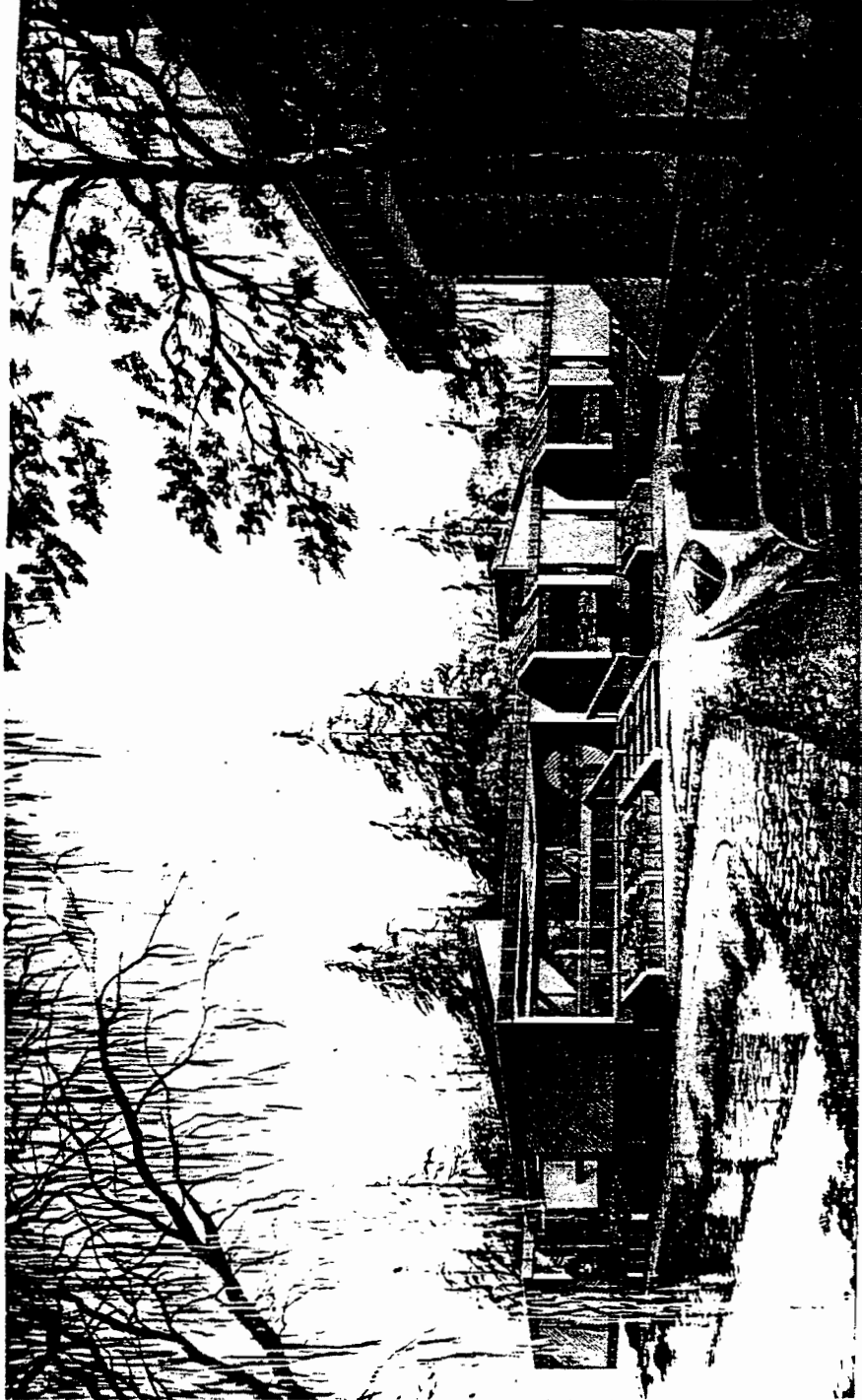


FIGURE 63: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

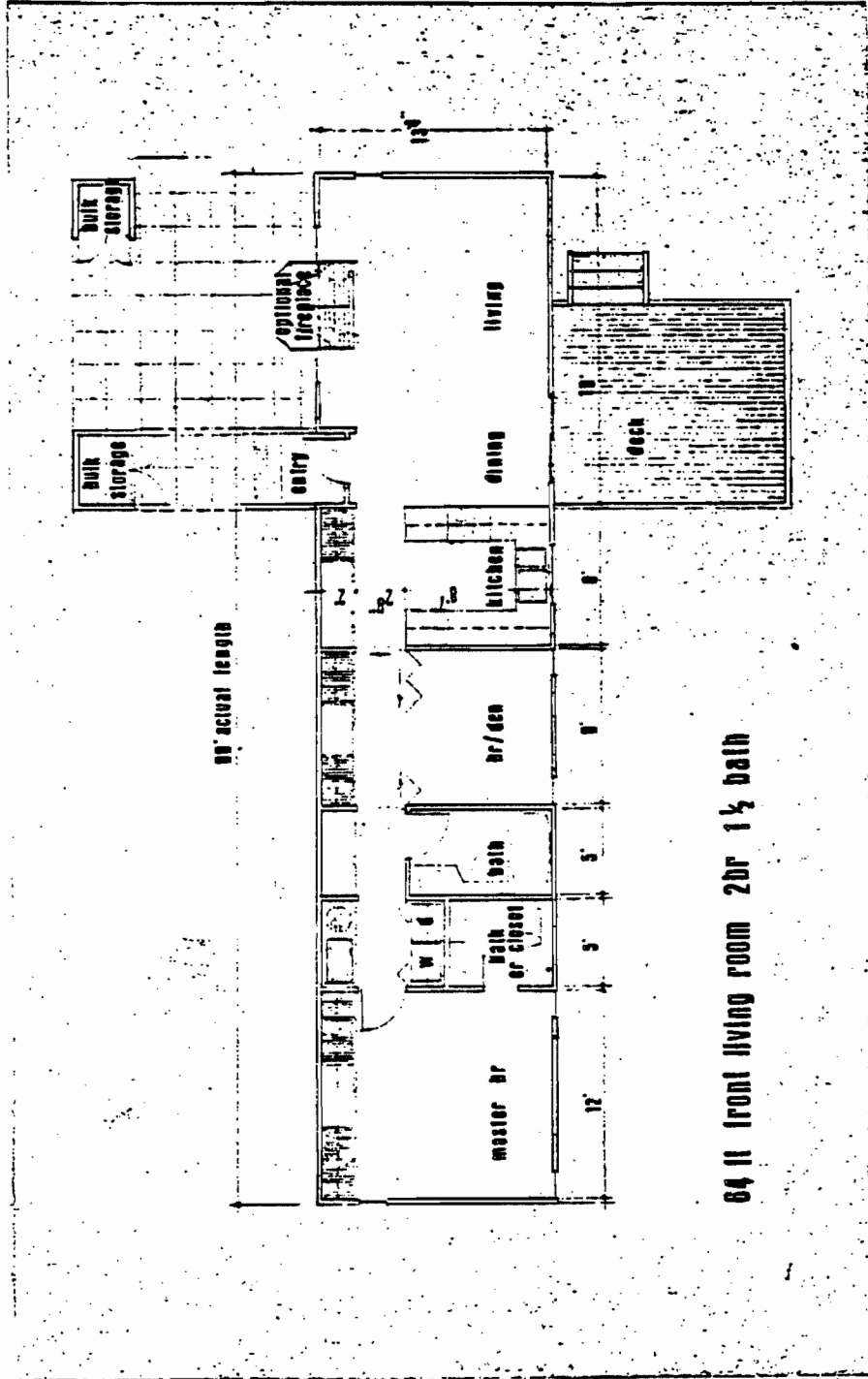
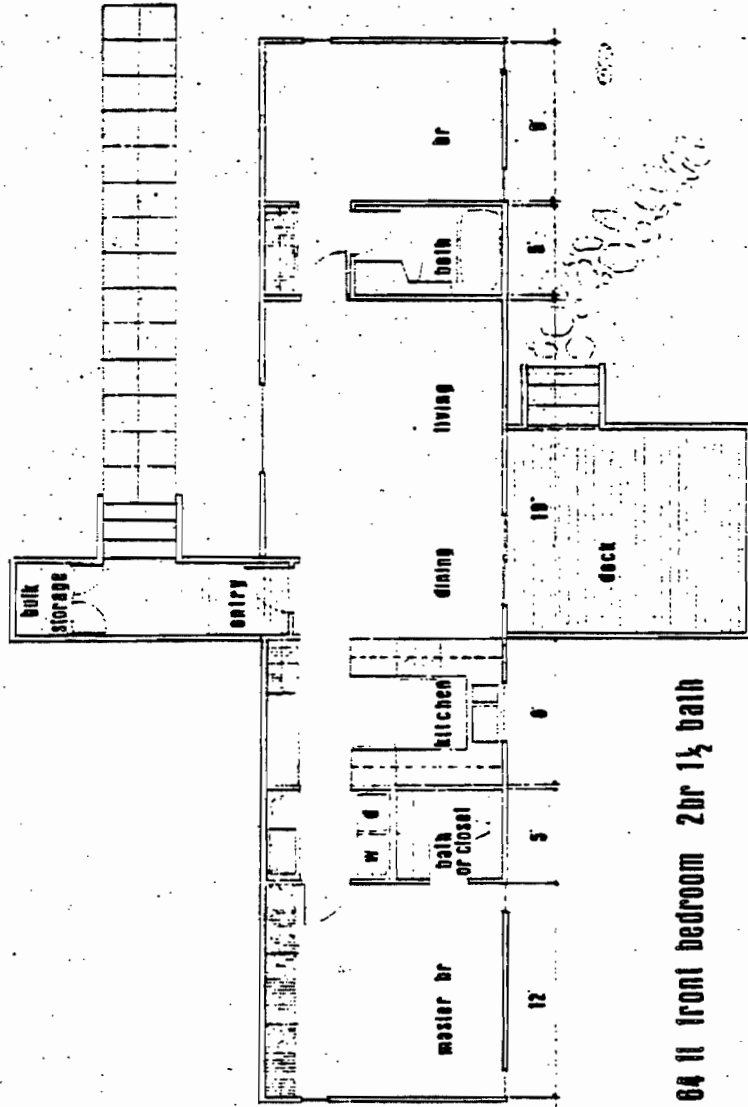


FIGURE 64: UNIT DESIGN: SITE PLANNING AS A DETERMINANT



64 ft front bedroom 2br 1 1/2 bath

FIGURE 65: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

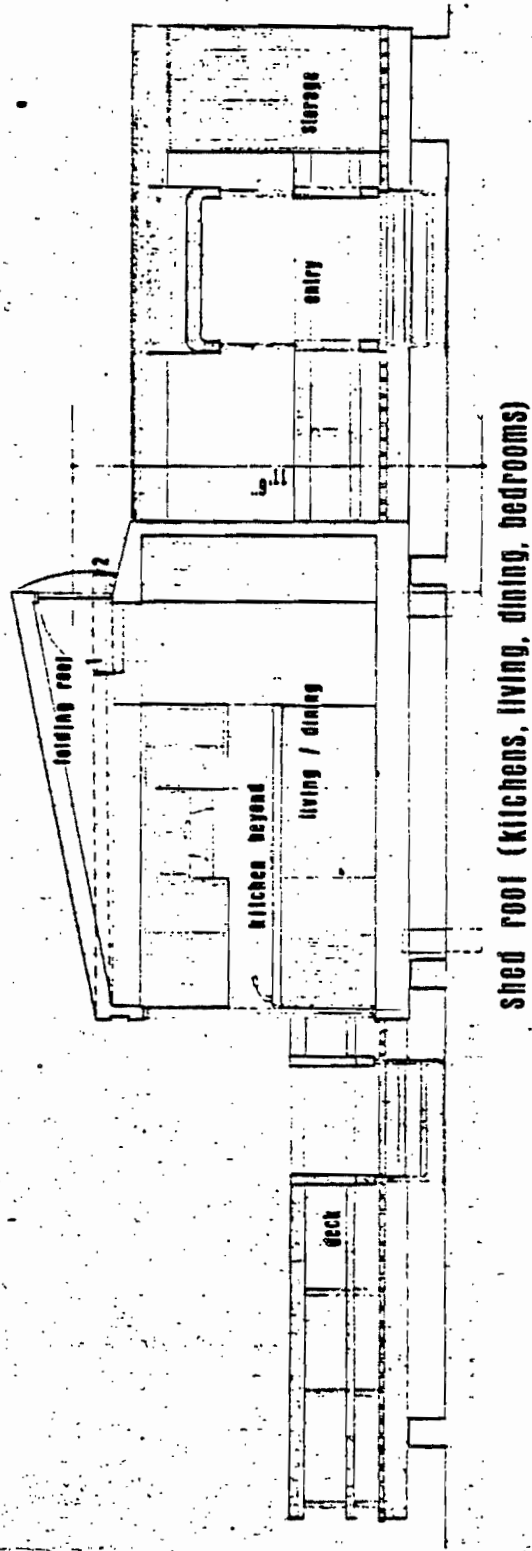


FIGURE 66: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

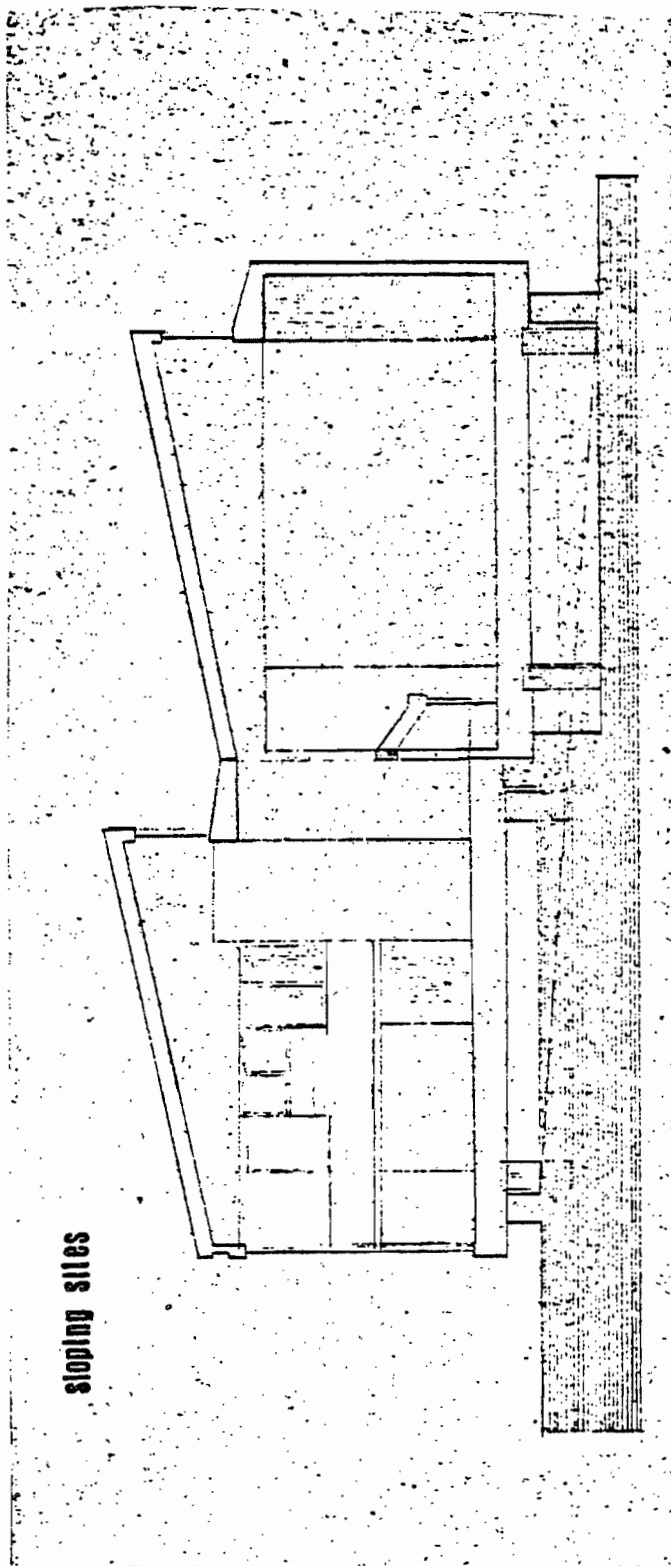


FIGURE 67: UNIT DESIGN: SITE PLANNING AS A DETERMINANT

NUMBER OF SPACES	OCCUPANTS	VISITORS	TOTAL SPACES
LESS THAN 1 PER LOT	0%	63%	0%
1 PER LOT	19%	26%	11%
2 PER LOT	64%	7%	47%
3 PER LOT	17%	4%	25%
4 PER LOT	0%	0%	10%
MORE THAN 4 PER LOT	0%	0%	7%
TOTAL	100%	100%	100%

LOCATION OF SPACES	OCCUPANTS	VISITORS
OFF-STREET	86%	59%
ON-STREET	14%	41%
TOTAL	100%	100%

SOURCE: FMHI/PS, 1973.

FIGURE 68: CAR SPACES, 88 PARKS

2.6 UTILITIES AND SERVICES

Utilities and services generally follow a linear pattern comparable to the linear pattern of streets and lots in most parks. Mains may parallel streets, as in a conventional subdivision, with service laterals running to mobile home pads on both sides of the street. However, the lack of permanent foundations and the light weight of mobile homes makes it possible to eliminate service laterals entirely or reduce their length, running smaller "mains" directly under the units. Electrical distribution systems, particularly underground systems, do not generally follow the linear pattern of units since primary lines lead to transformers which usually serve a cluster of several units. Since utility service connections are towards the rear of most mobile home pads, running mains under pads or to the rear of the pads may be more economical than running mains adjacent to streets. The economics of alternate utility layout patterns should be carefully considered once the basic unit layout is determined.

Utilities represent the major cost of mobile home parks (about 40% -- see Cost/Price Analysis). The efficiency of the design has direct bearing on the scope of desirable amenities that can be provided. Designs which vary considerably from the average unit component costs shown in the cost analysis demand a close look. The primary design objective, from an efficiency point of view, is to minimize the length

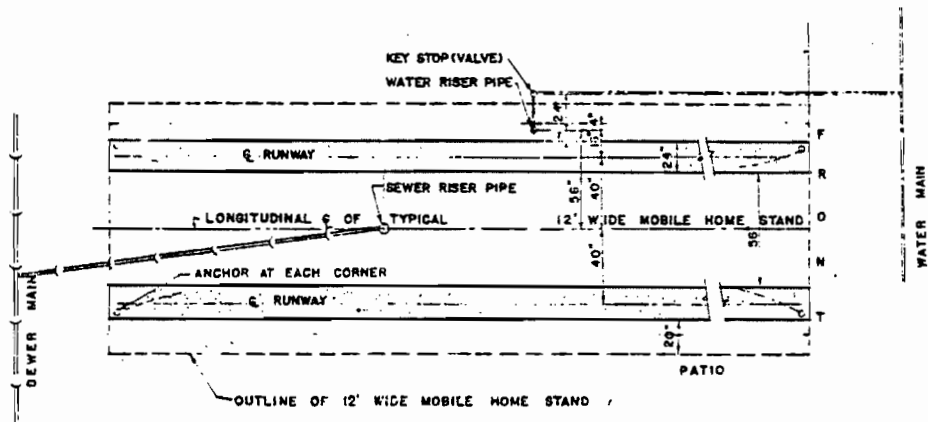
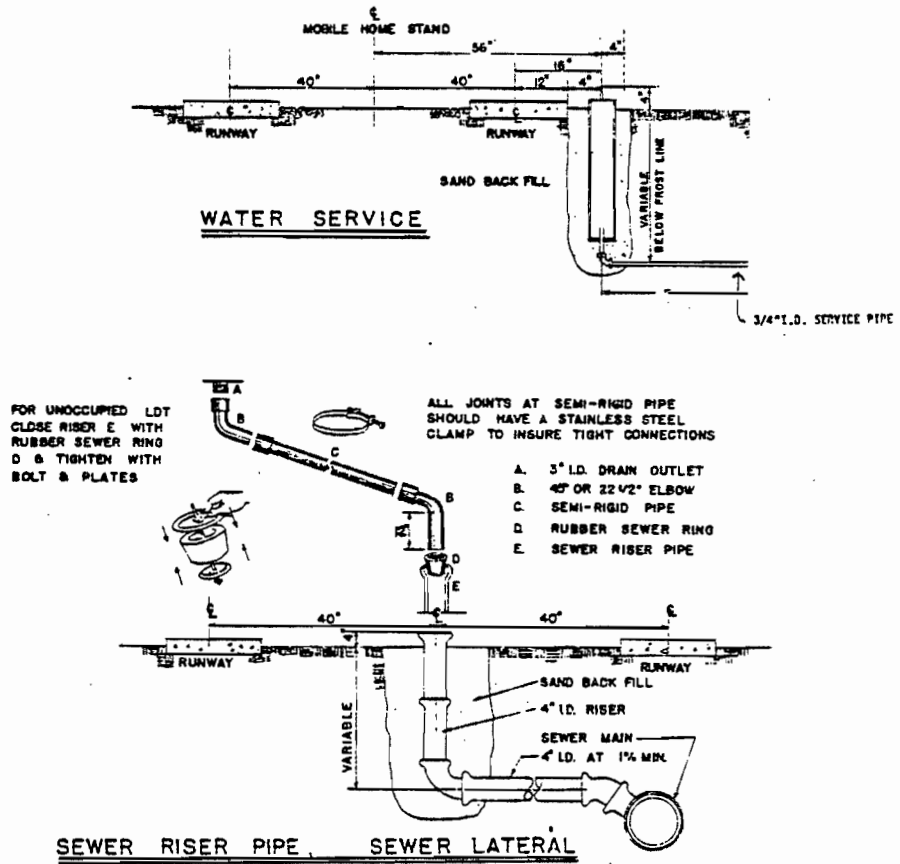
of runs and provide optimum sizing of lines and transformers for each layout. The efficiency of proposed layouts can be tested by comparing solutions in these terms.

Typical parks provide a basic water, sewer, and electrical system. Gas or oil systems are not provided in all parks, although when these fuels are available they are usually more economical than all-electric systems. Underground storm drainage systems are rare -- surface drainage systems and roll-edge curbs and gutters are more common. Street lights provide additional safety and encourage outdoor activities in quality parks.

Design criteria for mobile homes, sponsored by MHMA and the American National Standards Institute, standardizes to some degree the location of service point connections and has suggested compatible locations for service risers (Figures 69 and 70). Design solutions vary considerably in practice, however. In one park near Washington, units were custom-made with connections to the rear, where they are somewhat less conspicuous. Visually, the assortment of exposed utility risers under and near mobile homes contributes to the sense of disorder in many parks. Even when connections and transformers are placed to the rear of each lot, they will still be noticeable if landscaping is minimal. The most attractive solutions involve a combination of carefully-selected location and screening or landscaping. Combining utility risers and meters with a storage shed (Figure 69) is another solution. Poorly-located risers are not only unattractive -- they can compromise the function and privacy of outdoor spaces.

Trash service is often overlooked in design solutions. Individual trash pickup is more convenient but is usually more expensive in use. A carefully located, screened pedestal (Figure 69) can add a permanent element to each lot. Bulk storage containers are more common but usually less attractive.

Despite the importance of efficient engineering, the optimum utility/service solution is one which considers not only the cost but also the quality and visual impact of each design element.



LOCATION OF WATER & SEWER RISER PIPES

FIGURE 69: UTILITIES AND SERVICES

NOTE: DIMENSIONS VARY WITH MOBILE HOME SIZE

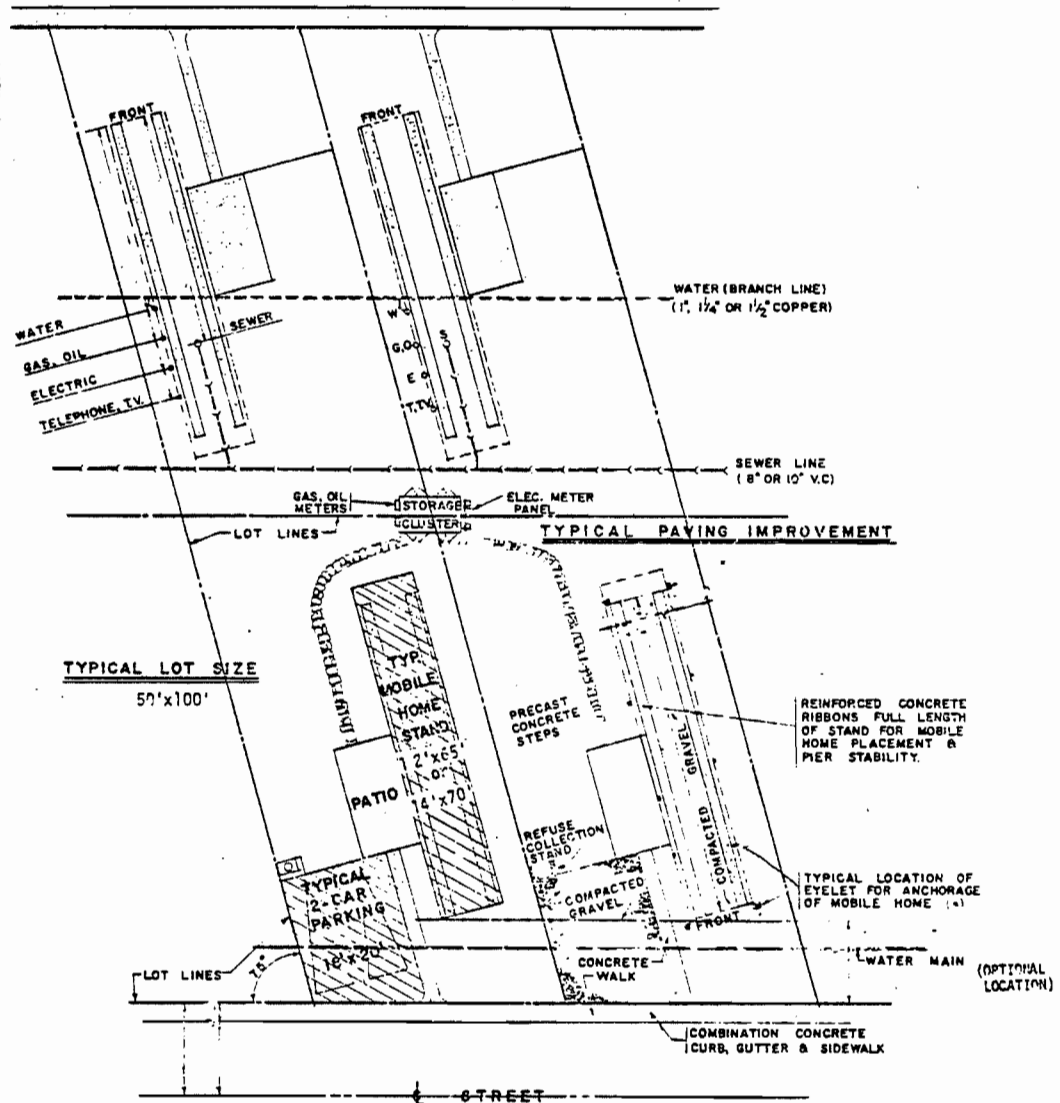


FIGURE 70: UTILITIES AND SERVICES

NOTE: DIMENSIONS VARY WITH MOBILE HOME SIZE

2.7 CONSTRUCTION

Construction schedules vary according to park size, location, and firm capability. Construction innovations in sitework are rare, and designs are subject to code and zoning requirements and review by building officials in the same manner as conventional housing projects. Although the mobile homes for a project can typically be produced in a month or less, a construction period of a year or more may be required for sitework.

The minimum development schedule for a 100-unit mobile home park is one year in length (Figure 71) and allows about half the time for preliminary planning and design, half for actual construction. Note that the schedule only allows 40 days for zoning approvals, which is very optimistic. Zoning approvals can easily take a year or longer in some communities, effectively doubling the actual development time required. Construction periods ranging from three months (75 spaces) to more than a year were reported to PMHI. Although an extremely short time schedule can adversely affect bids, interest costs and other carrying charges can be significantly reduced.

The dollar volume represented by most projects attracts smaller construction firms than the conventional housing industry, and this

affects schedules. The 34 parks providing cost data in the PMHI Park Survey were actually built in 69 different increments over a period of several years. Only 30% were built all at once.

Time-phased overlapping of design and construction can reduce time and costs, particularly in large projects. Design for long-lead items such as transformers, custom made for most projects, should be finalized early. For many projects, however, a two-month period for actual design is reasonable and the advantage of a single advertise/bid package may offset the advantages offered by time-phasing.

Construction innovations in park development are just as rare as in sitework for conventional housing. Although part of this is due to restraints imposed by local codes and building officials, the volume economies inherent in assembly line production have limited application at the site. Scale economies which do occur result primarily from purchasing materials in large volumes and reduced mobilization time.

The mobile home industry would benefit from review of code and zoning restraints, firm capabilities, and design standards to identify areas where the entire planning/design/construction process could be expedited. Development of standard design details and specifications is underway in other industry segments and could be applied to park construction. The length of time it takes to develop a mobile home park, particularly to obtain zoning approvals, remains one of the primary restraints to improved cost performance.

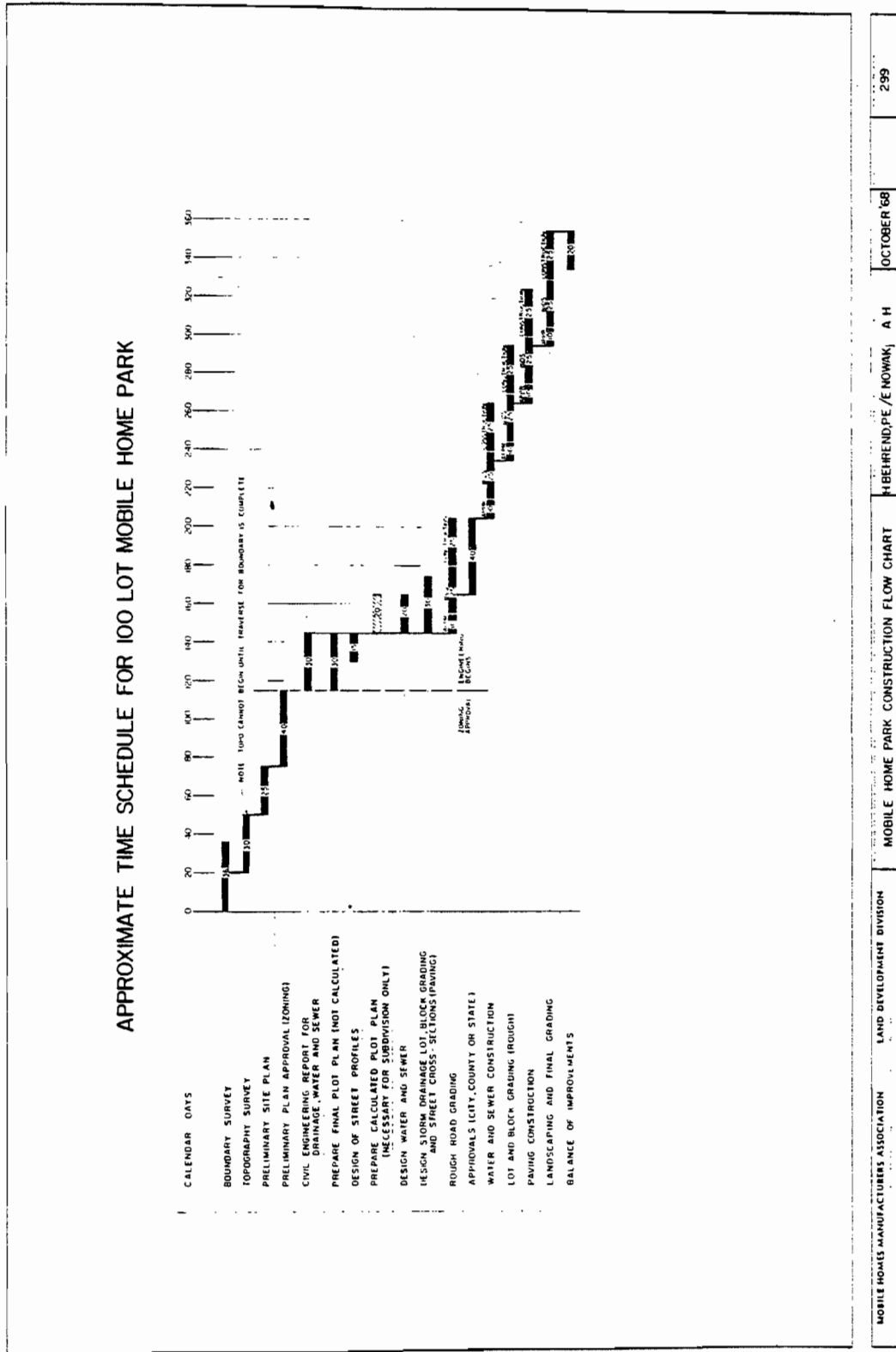


FIGURE 71: APPROXIMATE TIME SCHEDULE FOR 100 LOT MOBILE HOME PARK

3.

Park Operation and Management

3.1 PARK MANAGERS: CHARACTERISTICS

The preceding chapters have dealt with park occupant profiles and park design and development; following this analysis will be a general performance evaluation of the park operation and management process. Here, specific characteristics of operators are discussed, leading to some interesting conclusions.

The hypothesis underlying this analysis is that park manager characteristics correlate with certain specific policy and management decisions. In addition to examining the manager's qualifications for the demanding work he must perform, an attempt is made to discover such correlations and to draw a more complete picture of the interrelationships between such diverse variables as manager education, experience, background, owner expansion, and various "performance" variables.

A consistent procedure is followed throughout. First, managers are split into prototypical groups using various survey and other procedures. Each of these groups is then studied using crosstabulation techniques. Differences are noted between groups and conclusions are reported at the end of each group analysis.

The standard comparison variables used in the crosstabulation studies include "variety of tenants" and "services." Each of these variables

is a quantitative measure gleaned entirely from responses to PMHI Park Survey questions. Since it is impossible to ascribe qualitative "worths" to various types of services, it becomes clear that simply counting up the number of services (that is, the large variety that are represented on the PMHI/PS) is perhaps as valid a comparison criteria as any, providing one recognizes the inherent constraints associated with computer coding and analysis. This reasoning applies to "variety of tenants" as well.

Services considered include major facilities such as recreational buildings, shopping facilities, and religious services. Included as well are static, but still important items such as attractive surroundings and favorable location. One might argue that these are not "services" - however, since they contribute to the quality and livability of the park, it was felt that they must be included. "Variety of tenants" measures not only social type (retired, young adult, etc.), but also race distribution and variations in tenant economic status. Thus, "variety" is a measure of the make-up of the tenants over a wide range of economic and social variables.

There are some additional potential clarity problems that must be faced before starting analysis - first, the "personnel/space ratio." This quantity is simply the number of park personnel divided by the park size in number of spaces. Problems in interpretation arise when one considers very small parks which, of course, have very large personnel/space ratios. It is not clear that such a small park is actually run more efficiently than a larger park with the same number of personnel. In spite of this,

it is possible to use the ratio as a rough estimate of efficiency on larger parks, as well as an indicator of "type" of management.

Second, a quantity called "expansion" is used to separate managers for comparison. This quantity is a measure of the number of other business activities with which the park owner is preoccupied, within the park system, the mobile home industry, etc. It was felt that owners with numerous other interests would not be as available to guide overall park operation, and that managers of such parks would thus not be as responsive as might be desirable.

Chapter 3.1 finishes with cross-checks on geographic and park size factors. A final conclusion section is included for increased clarity.

3.1.1 Park Management Diversity

There are a number of management variables to consider when approaching the question of determining park policy as an approximate function of manager characteristics. One of the more important of these characteristics is "manager type." The PMHI/PS found that 56% of the questionnaire respondents answering the type question (question 2) identified themselves as park managers. However, 40% of these also identified themselves as owners and managers, while 30% said they were owner and developer as well as manager. The question one immediately asks is the difference in management response (i.e. park policy) if any, among these three groups: manager, manager/owner, and manager/owner/developer.

Manager

Statistical analysis of the PHMI/PS showed that a majority of managers had on-site residential construction backgrounds, followed by managers with prior experience in mobile home dealerships. Fifty percent of all managers had 11-15 years experience operating mobile home parks, 25% had 16+ years experience, and the rest fell evenly into the 0-5 year and 5-10 year brackets. Only 23.6% of park owners who hired full-time managers had expanded into more than three additional areas. When asked for suggestions for improvement of their park, a surprising 23.5% of managers declined to answer, 52.9% suggested management changes, while 41.2% suggested physical park changes.

Over 75% of the managers had personnel/space ratios of less than .02. Fifty-two point nine percent of the managers offered 2 or more services. Most managers (43.8%) operated 51-100 space parks, 18.8% managed 201-250 space parks, and 25% managed parks in the 101-200 space range.

Manager/Owner

Manager/owners were evenly spread in background, years of experience, and variety of tenants. As a group, they had generally expanded more than owners hiring full-time managers.

The most frequent improvement suggestions were management changes (66.7%),

physical park changes (66.7%), and "better mobile home design" (25%). Manager/owner parks tended to be small; 90% were under 150 spaces, 60% under 100. Over half of them had personnel/space ratios of less than .02. Eighty-three point three percent of manager/owner parks offered 0-2 services which is fewer than those offered by manager-run parks.

Manager/Owner/Developer

The backgrounds of this group were parallel to manager-only backgrounds, with a majority naming "on-site residential construction". They tended to have 0-10 years of park management experience (61.6%), with 30.8% having managed 16 or more years.

Expansion was most pronounced in this group (69.4%). Fifty percent had expanded into more than one area. Manager/owner/developers offered the most varied suggestions for improvement- management changes (63.9%), physical park changes (33.4%), and better mobile home design (25%).

Manager/owner/developers offered few park services; 72.2% offered 2 or fewer. This group, compared to the two previous had the fewest average number of spaces, with at least 61.3% operating parks with less than 50 spaces and 63.8% with personnel/space ratios of less than .015.

Variations in Policy

Comparing the three above categories, it is possible to draw some interesting conclusions. It was found that respondents who identified themselves as "manager" or "manager/owner/developer" had mostly construction backgrounds, while manager/owners had more diverse backgrounds. Managers tended to have more managerial experience than manager/owner/developers, while manager/owners had the least experience.

Manager/owner/developers showed the highest degree of expansion. This is probably due to their construction backgrounds and development experience. Though both managers and manager/owner/developers recommended "management changes" as the most frequent suggestion for improvement, manager/owners chose "physical park change" with this same frequency (see Figure 72). There was little variation among the categories regarding personnel/space ratios, although manager/owners seemed to operate with higher ratios than the other groups. Parks operated by full-time managers offered the most services - again, not a significantly greater number.

3.1.2 Manager Background

One of the first steps that must be taken in an examination of the park manager is a detailed look at his background. The manager's prior experience might be a prime factor in his response to a given management difficulty. "Background", however, is a difficult concept to quantify.

PREC CISTR ANE CROSSTAPS F-E-74 CN/28/74 PAGE 30
 FILE PARKS ICREATION DATE = 08/28/74) DATA FROM PARKS QUESTIONNAIRE
 ***** C R C S T A B U L A T I O N C F *****
 ***** BY SPC ***** # MIDDLE MCF SPACES *****
 ***** PAGE 1 OF 1 *****

MTYPE	SPC										TOTAL
	1-CC	2-CC	3-CC	4-CC	5-CC	6-CC	7-CC	8-CC	9-CC	10-CC	
P	1	7	2	2	3	1	0	0	0	0	16
	6.3	43.8	12.5	12.5	18.2	6.3	0.0	0.0	0.0	0.0	27.6
	4.3	46.7	22.2	50.0	75.0	50.0	0.0	0.0	0.0	0.0	
	1.7	12.1	3.4	3.4	5.2	1.7	0.0	0.0	0.0	0.0	
P-C	3	1	3	0	1	0	0	0	0	0	10
	30.0	30.0	30.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	17.2
	13.0	20.0	33.3	0.0	25.0	0.0	0.0	0.0	0.0	0.0	
	5.2	5.2	5.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
P-C	0	1	0	0	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
P-C-E	15	4	4	2	0	1	1	1	1	1	31
	61.5	12.9	12.9	6.5	0.0	3.2	3.2	3.2	3.2	3.2	53.4
	82.6	26.7	44.4	50.0	0.0	50.0	100.0	100.0	100.0	100.0	
	32.8	6.9	6.9	3.4	0.0	1.7	1.7	1.7	1.7	1.7	
COLUMN TOTAL	23	15	5	4	4	2	1	1	1	1	58
TOTAL	39.7	25.5	15.5	6.9	6.5	3.4	1.7	1.7	1.7	1.7	100.0

CHI SQUARE = 25.43558 WITH 18 DEGREES OF FREEDOM SIGNIFICANCE = 0.1134
 GAMMA'S V = 0.28234
 CONTINGENCY COEFFICIENT = 0.55212
 KENDALL'S TAU B = -0.36404 SIGNIFICANCE = 0.0000
 KENDALL'S TAU C = -0.32580 SIGNIFICANCE = 0.0001
 GAMMA = -0.49222
 SKEWNESS = -0.32986

Source: PMHI/PS

FIGURE 73: CROSSTABULATION OF MANAGER CLASSIFICATIONS BY PARK SIZE

True personal details can neither be elicited or computerized, making it impossible to create a total manager background profile. However, the PMHI/PS includes verbal-type questions on prior occupation, and the responses to these questions can be coded and submitted to statistical tests. Manager response to a given situation could still depend somewhat on prior occupation, in spite of the fact that such information is far from being a complete psychological profile.

Standard Industrial Classification Determined Trends

There are still certain mechanistic problems which had to be solved before actual statistical "background" tests could be made. A classification system had to be used in order to establish accurate statistical weights for given industrial occupations, and the system had to be applied to standardize the listed previous occupations. For this particular application, SIC (Standard Industrial Classification) guidelines were used, since they represent (1) an official classifying system, and (2) a well-documented list of occupation categories.

Using 1972 Economic Census data, weights for each industry grouping were established, enabling PMHI to assemble Figure 74. The table lists expected and observed percentages of specific SIC occupational groups. The "expected" percentages consist of the percentage, determined from Census data, of each group that one might expect to find in a random sample of the population.

SIC MAJOR DIVISIONS	OBSERVED % OF MANAGERS	EXPECTED % IN RANDOM SAMPLE
A. Agriculture	5.5	4.2
C. Construction	21.1	4.4
D. Manufacturing	6.4	25.1
E. Transportation	2.8	5.8
F. G. Wholesale and Retail Trade	19.3	20.6
H. Finance	11.9	5.1
I. Services	22.0	16.3
J. Public Administration	1.8	17.6
B. K. Other	9.2	0.9

Source: computed by a PMHI Task Force using expected employment percentages from the Statistical Abstract, 1973

Note: An overall Chi Square of the data showed overwhelming significance ($p < .01$). Tests of independent proportions showed that three categories were significant to the .01 level. Finance required a one-tail test to achieve significance to the .05 level.

FIGURE 74: OBSERVED VS. EXPECTED PARK MANAGER OCCUPATIONAL CATEGORIZATION USING STANDARD INDUSTRIAL CLASSIFICATION MAJOR DIVISIONS

A study of Figure 74 reveals major discrepancies between expected and observed percentages in Construction and Manufacturing, and to a lesser extent in Finance and Public Administration. A Chi Square of the data shows, as one might expect, overwhelming significance ($p < .01$). Individual tests of significance (independent proportions) of the four above-mentioned occupational groups also show significance to the 1% level, except the finance group, which required a one-tail test to achieve significance of ($p < .05$).

It is easy to understand why a significantly large number of managers are coming from Finance and especially from Construction. Fully 54% of our respondents were both manager or owner and developer of their park. Since developing a park requires a construction background and some knowledge of the financing involved, the significance is not surprising.

The lack of managers from Manufacturing and Public Administration is a somewhat involved question, to which there are a number of possible answers. For example, a public administration job can be thought of as a secure position, while a manufacturing job is often based on some acquired skill or trade. People in these occupations might have little incentive to accommodate the risk and possible financial difficulties involved in such a change in lifestyle. In fact, the likelihood of such a person even hearing about mobile home park management is rather remote.

Though the PMHI Park Survey data show significant movement from Construction and Finance into mobile home park management, the rigid SIC classification precludes any meaningful examination of other more subtle trends, such as movements from similar industries.

Other Classifications

A crosstab of the PMHI/PS background question vs. census region yields essentially the same results as a separate examination of background with a significant number of surveyed park operators coming from the SIC major group Construction. Since the question shows movement from similar industries, there is a large preponderance of "went straight into park operation" responses. The large percentage of "other" responses can be explained by noting that this category encompasses the majority of the SIC major groups, and thus condenses several rows of Figure 72 into one. Ignoring these two large groups, the largest response was "on-site residential construction", followed by "mobile home dealer". The only major regional variation from this expected pattern is the West Pacific region, where "housing manufacturing" ranks after "on-site residential construction," rather than "dealer". A more complete analysis of regional effects in general is done in item 3.1.5.

A crosstab of background vs. number of mobile home park spaces showed little significant deviation from the previous breakdown of "background"-with "on-site residential construction" and "dealer" the two major responses. In the 51-100 space and 151-200 space parks, "dealer" was a more frequent response than "on-site residential construction", however, this fact only demonstrates that dealer background respondents' parks do not tend to be small family operations. One may assume that many of the respondents with "dealer" backgrounds are still dealers and it is in their interest to seek more park spaces in which to place their homes.

Background also seems to have some effect on the degree of expansion (see Figure 75). Based on the percent of owners not expanded vs. percent expanded, those responding "dealer" to the background question had higher levels of expansion than any other group, an understandable figure in the light of possible dealer integration into park management. Second was the "construction" group, whose members are able to branch out because of their experience in the type of work required for starting new parks.

Variations in Policy

It is clear from analysis of the PMHI/PS data how "background" affects other variables on the PMHI/PS. With additional substantiation of the sort used in the previous section, one can begin to build a profile of mobile home park management simply by looking at operator variables. For example, managers operating a park with an expanded owner may differ significantly from other managers in their response to management problems.

In order to form a clearer picture of the influence of background on park management, a crosstab was run of background vs. manager response to problems. An interesting connection was found regarding the "suggestions for improvement" variable. Fifty-five point six percent of all "on-site residential construction" respondents checked "physical park change" as one of their suggestions for improvement. When one compares this to the small 15.4% of the "dealer" respondents in this category, manager background is clearly a determining factor (see Figure 76).

FRLO DISTR AND CROSSTARS R-N-74 08/26/74 PAGE 25
 FILE PARKS (CREATION DATE = 08/26/74) DATA FROM PARKS QUESTIONNAIRE
 ***** C R C S S T A B U L A T I O N C F *****
 BCKGND BACKGROUND OF MANAGER BY CDIV DEGREE OF DIVERSIFICATION
 ***** PAGE 1 OF 2 *****

BCKGND	CDIV								ROW TOTAL	
	COLMNT	0-2	3-4	5-6	7-8	9-10	11-12	13-14		
	RCN PCT COL PCT ICT PCT	C.0	1.CC1	2.CC1	3.CC1	4.CC1	5.CC1	6.0C1		7.0C1
BCKGND	0.C	0	0	1	0	0	0	0	0	1
		0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
DEALER	1.CC1	1	4	4	3	0	1	0	0	13
		7.7	30.8	30.8	23.1	0.0	7.7	0.0	0.0	9.8
		2.2	10.8	17.4	18.8	0.0	50.0	0.0	0.0	0.0
HOUSING MANUFACT	2.CC1	3	2	2	0	0	0	0	0	7
		42.9	28.6	28.6	0.0	0.0	0.0	0.0	0.0	5.3
		6.5	5.4	8.7	0.0	0.0	0.0	0.0	0.0	0.0
CONSTRUCTION	4.CC1	5	3	2	5	2	0	0	1	18
		27.8	16.7	11.1	27.8	11.1	0.0	0.0	5.6	13.6
		10.9	8.1	8.7	31.3	40.0	0.0	0.0	100.0	0.0
ECC	5.00	0	0	1	0	0	0	1	0	2
		0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0	1.5
		0.0	0.0	4.3	0.0	0.0	0.0	50.0	0.0	0.0
MEC	6.00	0	0	0	0	1	0	0	0	1
		0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.8
		0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0
DEVEC	7.00	0	0	0	0	0	0	1	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0
		0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
OTHER9	8.CC1	8	3	2	4	1	1	0	0	19
		42.1	15.8	10.5	21.1	5.3	5.3	0.0	0.0	14.8
		17.4	8.1	8.7	25.0	20.0	50.0	0.0	0.0	0.0
WENT STRAIGHT IN	9.CC1	29	25	11	4	1	0	0	0	70
		41.4	35.7	15.7	5.7	1.4	0.0	0.0	0.0	53.0
		83.0	67.6	47.8	25.0	20.0	0.0	0.0	0.0	0.0
ECLUMP TOTAL		46	37	23	16	5	2	2	1	132
		34.8	28.0	17.4	12.1	3.8	1.5	0.8	0.0	100.0

CPI SQUARE = 118.06936 WITH 56 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
 CRAPER'S V = 0.42649
 COLLINGENCY COEFFICIENT = 0.74840
 KENDALL'S TAU B = -0.24255 SIGNIFICANCE = 0.0000
 KENDALL'S TAU C = -0.19638 SIGNIFICANCE = 0.0004
 GAMMA = -0.32150
 SCHER'S C = -0.27820

Source: PMHI/PS

FIGURE 75: CROSSTABULATION OF EXPANSION MEASURE BY BACKGROUND VARIABLE

Park Development and Operation 390

FREC DISTR AND CROSSIANS M-R-74 08/26/74 PAGE 21
 FILE PARKS (CREATION DATE = 08/26/74) DATA FROM PARKS QUESTIONNAIRE
 ***** C R O S S T A B U L A T I O N O F *****
 BCKGRND BACKGROUND OF MANAGER BY SUGGIMP SUGGESTIONS FOR IMPROVEMENT
 ***** PAGE 1 OF 4 *****

		SUGIMP											RCH TOTAL
		MANAGE	PHYSICAL	1+2	BETTER	1+4	2+4	1+2+4	OTHER	1+8	2+8		
CCDA)	RCM PCI	MT CHANG	PARK CH		H IESIGN								
CCL PCI													
TCI PCI	0.0	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00		
9CKGND	0.0	0	0	0	0	0	0	0	0	0	0	0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	
DEALER	1.00	7	3	1	0	0	1	0	1	0	0	0	
	53.8	23.1	7.7	0.0	0.0	7.7	0.0	7.7	0.0	0.0	0.0	0.0	
	18.4	10.7	14.3	3.0	0.0	25.0	0.0	14.3	0.0	0.0	0.0	0.0	
	5.3	2.3	0.8	0.0	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.0	
HCLSLNG MANFACT	2.00	4	0	0	2	0	0	1	0	0	0	0	
	57.1	0.0	0.0	28.6	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	
	10.5	0.0	0.0	7.7	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	
	3.0	0.0	0.0	1.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	
CCNSTRUCTION	4.00	4	3	2	4	0	0	2	1	1	0	1	
	22.2	16.7	11.1	22.2	0.0	0.0	11.1	5.6	5.6	0.0	5.6	5.6	
	10.5	10.7	28.6	15.4	0.0	0.0	50.0	14.3	9.1	0.0	100.0	0.0	
	3.0	2.3	1.5	3.0	0.0	0.0	1.5	0.8	0.8	0.0	0.0	0.0	
DEC	5.00	0	1	0	0	0	0	1	0	0	0	0	
	0.0	50.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	
	0.0	3.6	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	
HCC	6.00	0	0	0	1	0	0	0	0	0	0	0	
	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DMCC	7.00	0	1	0	0	0	0	0	0	0	0	0	
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OTERS	8.00	4	6	1	5	0	0	1	0	2	0	0	
	21.1	31.6	5.3	26.3	0.0	0.0	5.3	0.0	10.5	0.0	0.0	0.0	
	10.5	21.4	14.3	19.2	0.0	0.0	25.0	0.0	18.2	0.0	0.0	0.0	
	3.0	4.5	0.8	3.8	0.0	0.0	0.8	0.0	1.5	0.0	0.0	0.0	
WENT STRAIGHT IN	9.00	19	14	3	14	3	3	1	3	7	3	0	
	27.1	20.6	4.3	20.0	4.3	4.3	1.4	4.3	10.0	4.3	0.0	0.0	
	50.0	50.0	42.9	53.8	100.0	75.0	25.0	42.9	63.6	100.0	0.0	0.0	
	14.4	10.6	2.3	10.6	2.3	2.3	0.8	2.3	9.1	2.3	0.0	0.0	
CELLPH		38	28	7	26	3	4	4	7	11	3	1	
TOTAL		28.8	21.2	5.3	19.7	2.3	3.0	3.0	5.3	8.3	2.3	0.8	

CHI SQUARE = 65.83711 WITH 80 DEGREES OF FREEDOM SIGNIFICANCE = 0.1283
 CRAMER'S V = 0.24569
 CONTINGENCY COEFFICIENT = 0.57687
 KENDALL'S TAU B = 0.08877 SIGNIFICANCE = 0.0639
 KENDALL'S TAU C = 0.07373 SIGNIFICANCE = 0.1030
 GAMMA = 0.12008
 SCHEFFER'S C = 0.00014

Source: PMHI/PS

FIGURE 76: CROSSTABULATION OF MANAGER BACKGROUND BY SUGGESTIONS FOR IMPROVEMENT

Of all respondents the most frequent choice of suggestions was "management change", with 51.5% of all respondents, followed by 34.1% checking "physical park change" and a disturbing 28.8% indicating "no suggestions". This last is unsettling because failure to demonstrate any need for improvement is a form of complacency which may endanger the ability of the park to meet changing requirements of tenants and/or new mobile homes. The "dealer" figure (53.8% compared to 20-30% "no improvement" figures for all other backgrounds) is a possible indication that owners with other business interests do not operate flexible parks.

An additional crosstab of background vs. "variety of tenants" was run with little significance. Suffice it to say that "dealer" respondents seemed to have somewhat more of a variety of tenants, but this figure is fairly tentative.

Several interesting hypotheses have been partially substantiated in item 3.1.2 - a statistically significant number of park operators came from "Construction" backgrounds. Operators with "dealer" backgrounds tend to manage parks for owners who are expanded into other areas, to own larger parks, and to offer fewer suggestions for improvement. "On-site residential construction" respondents, however, lean toward recommending physical park changes when asked about park improvement. Most operators said that management change would improve their park, while fewest recommended "better mobile home design." A full 28.8% recommended no improvement.

3.1.3 Management Experience and Training

One of the most obvious manager characteristics that must be explored is an operator's degree of training or experience. Though years of experience may be a negative factor, in that the management might tend to resist new trends toward better park facilities or services, it still may be fair to say that a more experienced manager would do a better job.

Education/Years Experience

The spread of the experience variable taken from the PMHI/PS question on training/experience was interesting; only 2.4% of the respondents who answered the question said they had had any formal training. Thirty-one percent had over 16 years of experience, 19.5% had 11-15 years, and the remaining respondents fell fairly evenly into the 0-5 year and 6-10 year brackets.

In an attempt to determine whether degree of experience would lessen the personnel/space ratio, a crosstab was run, and was slightly surprising. One could reason that a more experienced manager would require less help, and the personnel/space ratio would decrease as experience increased. However, 24.4% of the respondents had ratios greater than .05, of these 40% had from 0-5 years experience, 10% had 6-10 years and 40% had more than 10 years of experience. This is

probably due to the large number of so-called "ma-pa" park operations with comparatively few spaces and 2 or more park personnel thus raising the ratio. The data are too sketchy to indicate any major trend, but it would seem that the newer managers are working with slightly higher personnel/space ratios.

Variations in Policy

In order to determine more closely the effect of manager experience, crosstabs were run against several quantitative variables. A crosstab of experience vs. services offered shows that 90% of the newest managers (0-5 years experience) offered one or more services, while 77.8% of the 6-10 years group, and 69.2% of the 16+ years group offered one or more services (see Figure 77).

These percentages, however, are misleading; looking at two or more services (i.e. one service is grouped with 0), the figures read 70%, 55%, and 53.9%, respectively. A trend toward more facilities and/or services seems to be appearing among the newer managers, which indicates that an upgrading process is taking place in the park system.

This trend could appear in the "suggestions for improvement" crosstab; however, the "suggestions" variable is a more subtle one, indicating flexibility more than static services. Significant variations in this variable could easily be found in any experience bracket - for instance, a manager might see his park being outstripped by another newer facility,

FREQ DISTN AND CROSSTABS #-8-74 PAGE 59
 01/26/74
 FILE PARKS (CREATION DATE = 08/26/74) DATA FROM PARKS QUESTIONNAIRE
 ***** CROSSTABULATION OF SERVICES OFFERED *****
 YRSPKM YEARS HE MANAGED PARKS BY SERV SERVICES OFFERED ***** PAGE 1 OF 1

YRSPKM	SERV										ROW TOTAL
	COUNT	RCW PCT	CCL PCT	TOT PCT	0.0	1.001	2.001	3.001	4.001	8.001	
-3.00	0	100.0	0.0	0.0	0	0	0	0	0	0	1
HAD SCHOLING	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.00	1	20.0	20.0	20.0	2	3	2	2	0	0	10
0-5 YEARS EXPRI	10.0	18.2	18.2	18.2	30.0	42.9	50.0	20.0	0.0	0.0	24.4
14.3	2.4	4.9	4.9	4.9	7.3	4.9	4.9	4.9	0.0	0.0	0.0
2.00	2	22.7	33.3	22.2	2	2	0	0	0	0	5
6-10 YEARS	22.2	18.2	27.3	28.6	0.0	0.0	0.0	0.0	0.0	0.0	22.0
28.6	4.9	4.9	7.3	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.00	0	50.0	25.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	8
11-15 YEARS	0.0	9.8	19.2	0.0	50.0	0.0	0.0	0.0	0.0	0.0	19.5
0.0	0.0	9.8	4.9	0.0	4.9	0.0	0.0	4.9	0.0	0.0	0.0
4.00	4	15.4	30.8	15.4	2	2	0	0	0	0	13
16+ YEARS	30.8	18.2	36.4	28.6	0.0	0.0	0.0	0.0	7.7	0.0	31.7
57.1	9.8	4.9	9.8	4.9	0.0	4.9	0.0	0.0	100.0	0.0	0.0
9.8	7	11	11	7	4	4	4	4	2.4	0.0	41
COLUMN TOTAL	17.1	26.0	26.8	17.1	9.8	9.8	2.4	2.4	100.0	0.0	100.0

GFI SQUARE = 18.5868 WITH 20 DEGREES OF FREEDOM SIGNIFICANCE = 0.5480
 GRAFFER'S V = 0.33676
 CONTINGENCY COEFFICIENT = 0.55863
 KENDALL'S TAU B = -0.11586 SIGNIFICANCE = 0.1366
 KENDALL'S TAU C = -0.11154 SIGNIFICANCE = 0.1457
 GAMMA = -0.14735
 SPECTRUM D = -0.11329
 NUMBER OF MISSING OBSERVATIONS = 91

Source: PMHI/DS

FIGURE 77: CROSSTABULATION OF YEARS OF PARK MANAGEMENT EXPERIENCE BY SERVICES OFFERED

and thus tend to offer more "suggestions" than another manager. However, the result would still tend to indicate flexibility regardless of any individual situational peculiarity.

The suggestions crosstab offers few surprises; as one might expect, managers with over 10 years of experience offered the fewest suggestions, with the under 10 year group offering from 30-40% more. This might occur simply because of the time factors involved - an "old hand" at park management, if he stayed at the same park, would tend to gradually incorporate most, if not all of the features he thought desirable (see Figure 78).

The one trend which shows up among the suggestions is a 50% checking of "physical park changes" by managers with 0-5 years of experience. Though most other respondents suggested "management changes," 57.1% of all respondents checking both "management" and "physical" were in the 0-5 year experience bracket.

In order to determine the rental policy of groups of managers with varying experience, a crosstab against "variety of tenants" was run. This variable is, as was mentioned previously, a measure of the number of different types of tenants staying in the park. As had been expected, the more experienced operators had managed a wider range of tenants. The newer operators had a slightly larger-than-expected variety, but the trend is not significant enough to be given much credence.

It was thought that if a manager belonged to a state mobile home association, another aspect covered by the PMHI/PS, he would be likely to have

FREQ DISTR AND CROSSTABS 08-8-74 08/26/74 PAGE 61
 FILE PARKS ICREATION DATE = 08/26/74) DATA FROM PARKS QUESTIONNAIRE
 * * * * * C R O S S T A B U L A T I O N O F * * * * *
 YRS PKH YEARS HE MANAGED PARKS BY SUGIMP SUGGESTIONS FOR IMPROVEMENT * * * * *
 * * * * * PAGE 1 OF 1

	COUNT	MANAGE PHYSICAL 1+2	BETTER M 1+4	1+2+4	OTHER	1+8	ROW TOTAL
	RCW PCT	NT CHANG PARK CH	H DESIGN	5.001	7.001	8.001	9.001
	COL PCT	1-CCI	4.001	3.001	4.001	5.001	6.001
	TOT PCT	0.0	0.0	0.0	0.0	0.0	0.0
YRS PKH	-3.00	0	0	0	0	0	0
HAD SCHOLING	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0-5 YEARS EXPERI	1.00	2	1	4	1	1	10
	20.0	10.0	10.0	40.0	0.0	10.0	0.0
	15.4	11.1	50.0	57.1	0.0	100.0	0.0
	4.9	2.4	2.4	9.8	0.0	2.4	0.0
6-10 YEARS	2.00	1	3	0	0	0	9
	11.1	33.3	0.0	11.1	0.0	0.0	22.2
	7.7	33.3	0.0	14.3	0.0	0.0	50.0
	2.4	7.3	0.0	2.4	0.0	0.0	4.9
11-15 YEARS	3.00	4	3	0	0	0	8
	50.0	37.5	0.0	0.0	12.5	0.0	0.0
	30.8	33.3	0.0	0.0	100.0	0.0	0.0
	9.8	7.3	0.0	0.0	2.4	0.0	0.0
16+ YEARS	4.00	6	2	1	1	1	13
	46.2	15.4	7.7	7.7	0.0	0.0	7.7
	42.2	22.2	50.0	14.3	0.0	0.0	33.3
	14.6	4.9	2.4	2.4	0.0	0.0	2.4
CCLUPN	13	9	2	7	1	1	41
TOTAL	31.7	22.0	4.9	17.1	2.4	2.4	100.0

CHI SQUARE = 33.02109 WITH 32 DEGREES OF FREEDOM SIGNIFICANCE = 0.4170
 CRAMER'S V = 0.44872
 CONTINGENCY COEFFICIENT = 0.66791
 KENNALL'S TAU B = -0.20959 SIGNIFICANCE = 0.0237
 KENNALL'S TAU C = -0.20375 SIGNIFICANCE = 0.0270
 GAMMA = -0.26095
 SCOPER'S C = -0.20296
 NUMBER OF MISSING OBSERVATIONS = 91

Source: PMHI/PS

FIGURE 70: CROSSTABULATION OF YEARS OF PARK MANAGEMENT EXPERIENCE BY SUGGESTIONS FOR IMPROVEMENT

a better-run park. To test this assumption, crosstabs were run against all major variables, with inspecific results. Those respondents who said that they belonged to a state mobile home association had slightly higher personnel/space ratios, slightly more services, slightly more variety of tenants, and a few more suggestions for improvement. However, none of these crosstabs was significant enough to substantiate a strong statement. The frustration arises because of the statistical difficulty in lumping these four variables together (and thus increasing the significance) - the true interrelationships between them are not sufficiently well-defined. The only statement which can be made is that a member of a state mobile home association seems to differ from a non-member.

In summary, less experienced (i.e., newer) managers work with higher personnel/space ratios, have parks with considerably more services, and offer the most suggestions for improvement. More experienced managers tend to offer fewer services and suggestions, a majority indicating "management change" as a crucial improvement factor.

3.1.4 Owner Expansion: Operational Effects

One might theorize that owner business expansion would tend to make park management less responsive to problems and varying situations. In this section an attempt is made to uncover such a trend, if in fact it exists.

Crosstabs were run of degree of owner expansion vs. personnel/space ratios, services offered, and variety of tenants. As owner expansion increased several trends became evident although some were so slight as to be almost meaningless. The most definite trend was a reduction in the personnel/space ratio, which may merely reflect increasing park size. As expansion increases, a small decrease can be noted in the number of services offered. An extremely slight trend toward more variety of tenants as expansion increases is evident, however it is so slight that the apparent trend lacks much credibility.

Park owner expansion does not affect park operation to the degree that one might expect. Evidently, owners with other interests do not let their parks decay, but still take considerable care to insure proper service to their tenants. The one definite trend, that of a decrease in service as expansion increases, is 1) not a serious outstanding trend, and 2) does not compare unfavorably with an average of our PMHI/PS respondents.

3.1.5 Geographic/Park Size Factors

In order to provide a cross-check on regional and park size variations, crosstabs and statistical analyses were performed on regional and park size variables. It was found that considerable lessening of the personnel/space ratio correlated strongly with increase in park size. This is understandable; the smaller parks have large personnel/space ratios, but as park size increases, the number of personnel stays fairly con-

stant, and the ratio dwindles. Apparently, two to three personnel are handling parks varying in size from 1 to 150 spaces. It is an interesting question whether regular park service deteriorates as the park size increases; however, the data were insufficient to answer this question in the detail it deserves.

A definite trend is in evidence concerning the standard "service" variable which has been used in the previous discussions/analyses - parks with more spaces tended to offer more services. This lends credence to an earlier implied correlation between these two variables (item 3.1.1). Despite a slight upward trend in variety of tenants and suggestions for improvement as park size increases, there does not seem to be any definite correlation present.

Regional variations were slight and could not have contributed significantly to a specific trend. There was an insignificantly greater percent of lower personnel/space ratios among parks in the West South Central region, and an equally slight trend towards fewer services among parks in the West North Central region.

Variety of tenants was generally uniform (except for a slight dip in the South Atlantic region), as were suggestions for improvement from all regions. From this sample it seems that the significant variations in region do not cause significant variations in manager variables.

3.1.6 Summary: Significant Trends

It was found that there are interesting correlations between fairly diverse manager and park operation variables. In spite of a lack of trends in 3.1.4 (Owner Expansion), it is possible to predict, with some degree of accuracy, a manager's policies and park facilities simply by examining type, background, experience, and other fairly unrelated variables.

Full-time professional park managers (as opposed to manager/owners, etc.) tended to operate larger parks. They seemed more unwilling to offer suggestions for improvement, indicating satisfaction with present services. The services offered in their parks were, in fact, more numerous than those of other manager types. These managers also operated with smaller personnel/space ratios, although they were generally more experienced than other groups.

Manager/owners and manager/owner/developers seemed more willing to offer improvement suggestions. They seemed to run smaller parks, with less variety of tenants. Most managers favored "management changes" as the most important improvement to the park system; only manager/owner/developers and manager/owners offered "better mobile home design" as a frequent suggestion.

The PMHI/PS found that a statistically significant proportion of mobile home park managers had SIC Construction backgrounds. SIC groups

Manufacturing and Public Administration were represented by a significantly small number of managers, while significantly more than expected came from Finance.

Variations in background had a not inconsiderable effect on mobile home park management policy. It was found that managers with "mobile home dealer" backgrounds differed from the majority of "on-site residential construction" operators. "Dealer" respondents recommended "management changes" as the most important suggestions for park improvement, while "on-site residential construction" managers suggested, not surprisingly, "physical park change."

"Dealer" respondents had much more business expansion than other operator/owners - they also offered "no improvement" with far greater frequency than other groups. This would indicate that expanded owners have less flexible parks, but we have seen that expansion is not such a key variable. Evidently, mobile home dealers tend to run less flexible parks; "type" of expansion is more significant than "amount." A more qualitative study of this question could possibly throw additional light on the subject.

Experience was also a major factor in park policy - more experienced managers had larger personnel/space ratios (this directly contradicts inferences one might make from the manager type vs. experience crosstab, pointing out the danger of such extrapolation). Newer managers seemed to be working with higher personnel/space ratios than one would expect, judging from a general linear downward trend as experience decreases.

Less experienced managers operated parks with more service facilities, and offered more suggestions for improvement than did the more experienced operators. "Physical park change" was this group's most frequent suggestion, as opposed to "management change" from the more experienced managers. Variety of tenants, linearly decreasing as experience decreased, increased surprisingly with the newer managers.

Members of state mobile home associations (versus non-members) came out differently in every category. These differences were not significant statistically, but it is clear that a proper meld of the management variables might approach significance.

General owner expansion does not significantly affect park operation variables. It does, however, have an inverse relationship with number of services. A more qualitative study of such expansion is needed, as evidenced by "dealer" background managers' responses.

Cross-check analyses were performed on regional and park size variables in order to verify the significance of other two-variable responses. It was found that considerable lessening of the personnel/space ratio correlates with increase in park size. Services also increase in number as park size increases. All other size and regional variations were small enough to be ignored, though a slight upward trend in variety of tenants can be seen, naturally, as park size increases.

3.2 MOBILE HOME PARK OPERATION AND MANAGEMENT

3.2.1 Introduction

The evolution of mobile home parks from transient trailer camps to stable, planned communities has had a dramatic effect on the changing role of the park manager. The levels of expertise and insight that the park manager currently brings to his position vary widely. The professional manager, usually employed to run one of the many new, large parks, has frequently had prior relevant experience and is able to impart insight into the operation of these parks. In contrast to the professional manager is the continued presence of the husband and wife ownership teams, with little relevant experience, who develop or purchase their parks and then operate them without the assistance of hired professional managers. Though many of the newer, larger parks are managed by professionals with delegated authority from absentee owners, many of these parks and other smaller ones, both new and old, are run by owner-managers. Thus, the park owner who also functions as caretaker, troubleshooter, and accountant continues to be a major participant in the park system.

The purpose of this item (3.2.) is to characterize the manager's role in the operation of the typical park and his relationship to the park's

owner(s), its residents, and the community-at-large. To provide further insight into this characterization beyond the results of the PMHI Park Survey (which were discussed in some detail in item 3.1), a number of literature sources, from the extensive collection of documents assembled by PMHI, were drawn upon for comparable and informative findings.

3.2.2 General Description of the Managerial Types

The Three Principal Roles of the Park Manager

Park managers are most frequently employed in one of three roles, depending primarily on the park's size and type.

- a. The owner-manager, who directs a park that may be small or large with varying services, and who does so basically to establish a livelihood;
- b. The professional manager, hired by an owner who may be absent; the manager's responsibility is to run the park according to regulations -- set by himself or the owner -- and to achieve a reasonable profit;
- c. The professional manager employed by a cooperative or con-

owner(s), its residents, and the community-at-large. To provide further insight into this characterization beyond the results of the PMHI Park Survey (which were discussed in some detail in item 3.1), a number of literature sources, from the extensive collection of documents assembled by PMHI, were drawn upon for comparable and informative findings.

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- b. The professional manager, hired by an owner who may be absent; the manager's responsibility is to run the park according to regulations -- set by himself or the owner -- and to achieve a reasonable profit;
- c. The professional manager employed by a cooperative or con-

dominium mobile home community; in this instance, the manager is most often responsible to a community association which establishes the regulations for the park.

Currently the owner-manager and the professional manager hired by an absentee owner are both frequent forms of management. In the PMHI Park Survey 43% of the respondents identified themselves as owner-managers and another 15% as professional managers. The fact that 40% of all the respondents identified themselves solely as owners suggests that most, if not all, of these owners employ managers. (Apparently the owners of these parks answered the survey questionnaire; the questionnaire did not ask the owners if they employed a manager.) Thus, the PMHI survey shows that the occurrence of the hired professional manager and the owner-manager are close to equal. The number of professional managers in the park system who work in cooperative or condominium-based communities is small, primarily because of the rare occurrence of mobile home parks under such ownership.

The Professional Manager

Professional managers can be split into two groups according to their origin: those who are relatively experienced in the operation of parks, and for whom such work is their life occupation; and those who are residents of the park they manage and have taken on the managerial role as a part or full-time occupation. It is probable that in most instances this latter type of professional manager has no prior

experience in or direct exposure to park management and operation. This differentiation between these two types of professional manager suggests a difference in the degree of commitment exhibited by each: the first type is presumably committed to the park system in general, whereas the latter is more likely to be interested only in the park in which he lives and works. A difference in remuneration also exists: the first receives a salary and living accommodations and the second usually receives a rent-free site on which he has placed his own mobile home.

The type of professional manager is dependent on the size of the park and the amount of work the position requires. In a larger park, many of which have been developed during the last decade, a professional manager is expected to have prior experience in park operation, or at least some other relevant work experience. This manager will direct the park on a full-time basis and may have a staff of one or more full or part-time people to assist him. The complex operation of a large park and the responsibilities that the position entails will be more rigorous than for the live-in occasional manager. The professional manager may offer a reasonably complete direction for the large park, including such tasks as financial management, regulation setting, and tenant selection. The amount of direction required and maintained will, of course, depend on whether the owner is present and takes an active role in park operation. Alternately, the so-called occasional manager is likely to be employed in parks that are smaller and more often older. This manager will also probably be responsible

for a park in which less extensive services are present, thus demanding less of his time. Whether the managers of these smaller parks, who are often employed on a less formal basis than the managers of the larger parks, have the same level of authority and the responsibilities for setting regulations and financial policy is not clear. It would appear that these managers of the smaller parks would not, in fact, have the same amount of responsibility over the direction of a park as would the professional manager hired from outside.

The manager's role as either a professional hired from outside of the park he operates or as an occasional manager hired from within the park will most likely have an effect on the relationship between the manager and the residents of the park. A study of smaller adult parks in California found that, in many cases, park managers had lived in mobile home parks for some time before deciding to look for a manager's job.¹ Some of these people had slowly worked into a manager's or assistant manager's position within their own communities. The result among such managers, working in parks in which they had previously lived solely as occupants, was that the relations between them and the other tenants were generally quite cordial and harmonious. The relationship between park occupants and the professional manager hired from outside of the immediate park is likely to be more formalized and distant at the outset, although this does not preclude the development of a comfortable manager-occupant relationship.

Lastly, the characterizations of managers vary greatly according to park size, so that such descriptions rendered above should be taken only as generalizations. Further research is necessary to offer more definitive characterizations of professional park managers.

The Park Owner-Manager

The owner-manager differs from the professional manager perhaps primarily in that the professional manager must necessarily institute policy that will be acceptable to the owner, whereas the owner-manager has no such intermediate. The owner-manager will often exercise more exhaustive enforcement of the rules and regulations under which the park is operated. That such owner-managers are most frequently found in parks of less than 100 spaces means that both prospective and present tenants may be subject to more rigorous screening and closer scrutiny than would be the case in a larger park, particularly one operated by a professional manager.

Flexibility is another advantage which accrues to the operator who owns his park. Unlike traditional apartments or housing developments, mobile home parks can adjust to changes in tastes, layout and demand for unit size. Shifts in product styles and resident incomes can be accommodated by unit turnover. The ability to foresee changes

and direct necessary adjustments gives the park owner/operator the flexibility to adapt to demands from dealers and homeowners while remaining profitable.²

The Manager Working for the Absentee Owner

The professional manager who works for an absentee owner is necessarily responsible to the park owner for operating the park and insuring a decent return on the owner's investment. The owner must clearly delineate the responsibilities that he wishes the manager to perform. Frequently the absentee owner will provide the resident manager with a reasonable amount of autonomy, allowing him to set his own regulations and admit tenants of his own choosing. The operation of the park, with regard to its financial status, will be worked out by the owner with the assistance and consultation of the professional manager. Of course most owners seek to employ professional managers who will insure a smooth-running, profit-making, virtually trouble-free operation. The owner naturally wishes to be kept well informed of what issues have arisen and how they are handled.³

The Role of the Manager Working for Collective Land Ownerships

The function of the park manager is essentially the same in condominium and cooperative mobile home communities. Here, though, the park operator

has the additional task of implementing policies for a governing board which represents the residents. It is interesting to note that some mobile home owners are wary of condominium and cooperative situations, fearing lack of control by the management over resales, maintenance, and use of communal facilities. Some elderly park residents worry that upkeep of land and property taxes would be prohibitive in anything other than a rental arrangement.⁴

3.2.3 Managerial Roles

Scope of Responsibilities

A general list of management activities within a mobile home park would typically include:

Screening of applicants and eviction of disruptive tenants

Insuring that tenants comply with regulations, and in the case of manager/owners, the formulation of those rules.

Informing residents of ordinances and of their own responsibilities

Insuring that the park is kept in good repair and is clean, establishing rents and fees

Yard and common area maintenance

Functioning as an intermediary between owner and residents (in the case of absentee ownership)

Supervision of recreational and social activities

Purchase of products necessary for construction in and upkeep of the park, as well as products to be sold to tenants and the public.⁵

Interacting with dealers concerning the sale of mobile homes for placement within the park.

Acting as a mediator between the mobile home community and the outside community, responding to possible community opposition.

Crosstabs of major problem in park operation by park size and age, showed that tenant problems were problems of greater magnitude for the larger parks (Figure 79). It was also shown that the newest parks are most likely to rate tenant related problems high on the list of major park operation problems (Figure 80).

In addition to the tasks listed above, the park manager may also be responsible for directing and approving the resale of mobile homes within the community. Removal policies vary with the size of the park, but generally managers have concrete strategies for the up-dating and up-grading of mobile home units. Often with the departure of the owner of the unit, the manager will sell the mobile home on the used market, or scrap it and replace it with a new unit for sale to the next tenant on the space. The commission on the new unit may be calculated to cover any loss that might be sustained to the old unit.⁶ Such phase-out activities are considered an important management task and essential in maintaining the appearance of the park. An Urban Land Institute survey found that 83% of their manager respondents controlled the type, appearance, and essential physical features of their mobile home parks. Only 2% placed no restrictions at all.⁷

FREQ DISTR AND CROSSTABS FOR PRTE AND PABLA C. BY IRC 8-8-74 01/16/75 PAGE 213

FILE PARKS (CREATION DATE = 01/16/75) DATA FROM PARKS QUESTIONNAIRE

----- D E S C R I P T I O N O F S U B P O P U L A T I O N S -----

CREATION VARIABLE TENANTS MAJOR PROBLEM: TENANTS
 DOWN BY SPC F MOBILE HOME SPACES

VARIABLE	CODE	VALUE LABEL	SUM	MEAN	STANDARD DEVIATION	VARIANCE
FOR ENTIRE POPULATION						
SPC	1.00	1-50 SPACES	36,0000	0.3030	0.4687	0.2388
SPC	2.00	51-100	9,000	0.265	0.468	0.218
SPC	3.00	101-150	12,000	0.400	0.450	0.203
SPC	4.00	151-200	4,000	0.300	0.480	0.231
SPC	5.00	201-250	3,000	0.600	0.540	0.292
SPC	6.00	251-300	3,000	0.500	0.540	0.292
SPC	7.00	300+	1,000	0.500	0.707	0.500
SPC			4,000	1.000	0.0	0.0

TOTAL CASES = 132
 MISSING CASES = 28 OR 28.8 PC1.

Source: PMHI/PS

FIGURE 79: CROSSTABULATION OF MAJOR PROBLEM: TENANTS BY
NUMBER OF MOBILE HOME SPACES

Park Development and Operation

THIS PAGE REPRESENTS THE FOLLING MATERIAL WHICH WAS ILLEGIBLE:

FIGURE 80: Crosstabulation of Major Problem:Tenants by
Year Park Started

Source: PMHI/PS

Managerial Assistants

In conducting the community's recreational program, the manager may require an assistant: for instance, often a social director elected by the residents is employed to aid in the collection of money for trips, entertainment and other outside activities and to assist in organizing park programs. Usually family parks, which are by nature more home-oriented than community oriented, may need less supervised recreational provisions than retirement parks. In the former case, play facilities for the children are considered an important recreational asset.

Resident associations, especially popular in service-oriented parks, are formed to organize daily events and large-scale recreational activities.

Information dissemination within the park is usually accomplished via a bulletin board and a newspaper. The latter covers upcoming recreational events, specific park business, general mobile home news, and personal items such as birthdays, anniversaries, visits and trips.⁸

3.2.4 Relationship of Managers to Residents

Tenant Selection

Historically the number of mobile homes has far exceeded the number of

available park sites, and spaces for newly purchased units have been at a premium. As a result, park managers exercise considerable control over resident mobile home owners. Thus managers usually have little difficulty in finding replacements for tenants whom they consider unsuitable. In the PMHI Park Survey, it was found that 47% of the respondents had no vacant spaces and 41% had a waiting list of prospective tenants. Parks oriented towards retired groups are more likely to have waiting lists, indicating that spaces in many of these parks are in high demand (Figure 81). This is also substantiated by a crosstab showing highest space vacancy rates among "non-retired" parks (see Figure 82). The politics of scarcity can give park managers almost total discretion over prospective tenants. Determining what characterizes a "suitable" tenant is largely a matter of preference.

The importance of mobile homes as a potential source of low-cost housing is without question, as is the shortage of adequate shelter for families of less than average incomes. But it seems that this option has yet to be tapped to a significant degree: although racial minorities often fall into the below-average income category, less than 2% of the national mobile home owner population is Black and Spanish-speaking.⁹ Of the park managers responding to the PMHI Park Survey, 18% reported having, or having had, black tenants. Further research is necessary to determine whether alleged discriminatory tenant screening practices on the part of park owners and/or managers or various social, financial, or geographical factors affecting the minority population contribute to the under-utilization of mobile homes as a source of low-cost housing.

Park Development and Operation

THIS PAGE REPRESENTS THE FOLLOWING MATERIAL WHICH WAS ILLEGIBLE:

FIGURE 81: Crosstabulation of Residents-Retired by Waiting
List For Tenants

Source: PMHI/PS

Park Development and Operation

THIS PAGE REPRESENTS THE FOLLOWING MATERIAL WHICH WAS ILLEGIBLE:

FIGURE 82: Crosstabulation of Space Vacancy Rate 72 by
Residents-Retired

Source: PMHI/PS

Rules and Regulations

The problems of park managers vary with the type of park they operate (closed, adult, family, resort), the kind of home owners with whom they must deal, and, since zoning and taxation laws are by no means nationally consistent, the state and county in which the park is located. Most operators and owners have responded to this set of issues by structuring a detailed list of rules designed to regulate the operation of the park, to please investors, and to insure a minimum of friction with the surrounding community. The professional manager must balance several vested and sometimes conflicting interests.

The rules and regulations of mobile home parks are usually determined by two factors: 1) the desires of the actual or potential park occupants as perceived by the manager, and 2) the desires of the community at large as it expresses them or as perceived by the park owner or manager. Those regulations which are established in response to the wishes of the park residents themselves are legitimate ones; it is reasonable to expect that, since these rules most likely reflect the wishes of the majority, few individuals would feel constrained by them. For example, the occupants of a park composed primarily of elderly residents might prefer not to have children in the park.

But the validity of those restrictions imposed by the wishes of the community at large may be called into question, especially when these rules are instituted not because of the desires of the residents but solely because of prevailing pressure from the surrounding community. A prime example of this type of regulation would be those prohibitions

against children and low-income groups which are a direct result of local zoning procedures. In many parts of the country, it is difficult for developers to obtain favorable zoning without an implicit or explicit guarantee that the park will prohibit children (to save the locality additional educational costs) or low-income groups (to preserve the "good appearance" of the community). A similar situation also exists in traditional housing in terms of half- or full-acre lot zoning which assures that low-income groups are excluded by high pricing. If such zoning practices reflect the fiscal consensus of the community, the blame lies with the local government which institutes such practices, not the park owners and managers who must implement them. If this vicious circle is to be broken, fiscal zoning policies must be re-examined and the problems of mobile home taxation dealt with (see Taxation, Volume V).

In a sense, such rules can be traced to the transition period of park development. As trailer camps evolved into mobile home parks, the need arose for a new image of parks as stable, ordered communities of responsible citizens. Owners and operators extended their authority to include not only the physical setting and maintenance of the site, but also the behavioral and social interactions of the residents.

In one extreme example, a park in California has a "declaration of restriction" covering the care of the lot and the placement of property such as boats, trailers, television antennas, clotheslines, and plants.¹¹ In another unusual case, a New Jersey park even makes suggestions as to the proper moral conduct of the residents.¹² Although rules and regulations are established in most parks, they are, of course, not carried to the extremes of the above-mentioned examples.

Once admitted to a park, a mobile home owner may find that he is a "tenant at will." Lacking a legal agreement such as a lease which could be used as leverage in negotiating with the management, the mobile home owner may be threatened with eviction by the operator of the park for non-compliance with the rules of the park.¹³

Normally, the park manager is responsible for purchasing in large quantities products for maintenance and improvement of the park, as well as those products which are necessary for construction or enlargement of the site. Many operators also conduct extra businesses to "serve tenants and the public," such as small stores, restaurants, motels, gas stations, and repair shops for mobile homes. Though the availability of such goods or services is usually a matter of convenience for park residents, there are alleged instances where the influence exerted by the management to purchase these goods or services are imposed on the residents with some pressure.¹⁴ However, PMHI has found no evidence to support these claims.

Tenants who wish to sell their homes encounter another set of difficulties. Because of the limited market for used mobile homes most mobile homes are left in place after re-sale. In the re-sale process, the home owner is at a distinct disadvantage. When the unit is sold to the park owner/operator, there may be a considerable difference between the appraised value and the purchase offer.¹⁵

In most situations a resident who moves from a park cannot transfer the right to his space in the park. He either sells his unit to the park management, or if a private sale is made, the new buyer is forced to tow the unit out of the park and try to find a new location. In extreme cases, when the new owner is allowed to occupy the same site a fee may be charged by the management for connecting the utilities, even when those utilities have not been disconnected.¹⁶

It is not unusual for park operators to require prior approval of the sale to a new homeowner, and to ask for character references, credit checks, and application for owner/operators when resale fees are charged. Generally taken as a commission for the sale of the unit, the re-sale fee is paid by the new owner in exchange for the guarantee of the availability of a space. This commission can be levied regardless of whether or not the professional brokerage function is performed by the manager.¹⁷ In Massachusetts, the Salem Superior Court has struck down this type of fee as a violation of the Consumer Protection Act, stating that re-sale fees constituted "unfair and deceptive trade practices."¹⁸

3.2.5 Relationship of Park Management to Mobile Home Dealers

The professional park manager must sustain business relationships not only with his employer and the residents of his park, but also with his colleagues in other parks and in other sectors of the mobile home industry. Of this latter set of relationships, interaction with mobile home dealers is perhaps the most important.

Mobile home dealers usually make the initial contact with prospective park occupants. The impression which an individual dealer makes on the buying public has a direct effect on the success of neighboring park operations. An Owens-Corning survey has provided a number of interesting facts about people who have bought their homes from dealers in the industry.¹⁹

The vast majority of respondents in that survey chose their dealers by driving around, usually visiting from two to three dealerships. The higher income and younger shoppers tended to investigate a larger number of dealerships. The survey also found that the low cost of mobile homes was the most appealing factor to the younger groups of buyers, and to those who eventually purchased units which cost less than \$4000. Buyers of higher priced homes usually cited "good construction" as the reason for their unit choice.

The mobile home dealer's influence on the relationship between managers and residents can extend beyond the choice of a unit and the first entrance of new home owners into the park. Park selection and initial unit maintenance are two categories of responsibility for which dealers as well as park managers and home owners are liable. Often a dealer may lease sites in a mobile home park, so that a sale may be facilitated by the existence of a readily-available site on which to locate the new unit. Where park spaces are at a premium, and dealers selling homes are plentiful, such dealers will often pay a park manager a fee in order to secure a site. In some cases it is impossible for a dealer to make a

sale without this kind of arrangement. Aware that park space is limited, most new homeowners are willing to comply with the dealer's settlement. The dealer thus may have a great influence over his customers' choice of parks.²⁰

If maintenance problems occur shortly after a new unit is in place, they are often handled by the dealer, though it is the park manager who must act as an intermediary in facilitating dealer service. Improper plumbing and heating are among the most frequently-cited difficulties. The level of customer satisfaction with the dealer and the unit is largely dependent on how well these two problems are handled. The park manager's relationship with the dealer can also be affected by the consistency with which such problems occur and are resolved.²¹

It is interesting to note that a substantial number of park operator-respondents in the PMHI Park Survey cited increased dealer co-operation as one of the most positive changes that could be made in the industry. Though in some instances dealers are accused of getting an unfair percentage of profits, many suggestions have been made for creative dealer co-operation. Some managers wanted to foster interaction between dealers and state officials, so that more enlightened mobile home legislation could be passed. Many felt that park rules and regulations should be structured only after dealers are consulted. Still others felt that local boards of mobile home dealers should be set up to act in an advisory capacity to "amateur" park developers.

3.2.6 Relationship of Park Management to the Community-At-Large

The completion of a mobile home park is not necessarily the end of opposition from the surrounding residential communities. Motivated by fears of rising school costs, lost property tax revenue, threatened assessments on contiguous property, and municipal service overload, citizens in the community-at-large will need to have many questions answered. Much of the public relations responsibility is delegated to the park manager, who may find that alliances with local businesses and the local Chamber of Commerce are his most successful source of support.²²

Inviting local residents to participate in open house tours and other events scheduled in the mobile home park is also a means of allaying doubts about the physical image of the park. Encouragement of interaction between park and community people is also important in establishing positive public relations between mobile home dwellers and their conventionally-housed neighbors.²³

3.3 REAL VERSUS IDEAL SITUATION

3.3.1 Manager and Owner: Problems

If the manager is not the owner of the park, he as an employee is responsible for efficiently running the park as well as insuring a decent return on the owner's investment. The owner, however, must clearly delineate those responsibilities he delegates to his manager. If not, conflict may result.

The question of sufficient salary may become a source of friction. Park managers are sometimes given a mobile home to live in as part of their salary. Other times they must have their own unit, but are offered free rent. As might be supposed, the size of the park influences the type of remuneration given the park manager -- larger parks appear to require more skills and time because of the increased complexities of such operations.

Attendant functions may increase over time and the manager may need to hire additional personnel. Assistants are often needed to alleviate the manager's work load by dealing with the many details of park operation. A yard man or a clean-up man may also be needed.²⁴

If the manager feels that it is necessary to hire additional employees and there are sufficient financial resources to allow it,

he still needs authority from the owner to do so.

The increasing number of mobile home parks being developed and operated by multiple-park ownership companies is bringing a sophistication to park management which previously may not have been present. In the past, when owners managed small, independent parks (e.g., often as husband and wife teams), such park managements were frequently noted for their warmth and understanding. This may also be true for professional managers of large-scale parks. Yet, the possibility exists that these managers, be they independents or part of a multiple-park ownership corporation, can become too impersonal and too detached in their supervision of the everyday routines of such a community. Because these managers have a primarily professional interest in the park, being a fair and rational individual in handling complaints and problems may not be enough to nurture the mobile home community. For example, one survey observed that those mobile home parks which were owned and operated by individuals living in or near the parks were better kept and more attractive than those parks owned by firms or individuals dwelling outside the park.

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3.3.2 Manager and Tenants: Problems

The manager, in his relations with park tenants, often has extraordinary control over the behaviors and actions of the residents. This control begins with the application for park admission and continues throughout their relationship until the resident sells his mobile home and leaves the park.

Because ordinances restricting the placement of mobile homes on individual lots exist in many locales throughout the United States, considerable pressure may be placed on mobile home parks to accommodate the mobile home units. The presence of parks is restricted in different regions of the country; this is especially true of the northeastern United States and specifically the state of Massachusetts.

The survey has noted that waiting lists for prospective tenants have averaged over four years in duration.²⁶ Park managers can afford to select their prospective residents carefully. If a couple applying for admittance does not appear suitable, then there is little difficulty in finding other residents. The use or practice of establishing entrance fees arose with new tenants paying the manager a sum of money to encourage him to approve their application. Currently many park managers can demand high fees because of the scarcity of park space in many areas of the nation.

There appears to be a limited representation of minorities within the mobile home population.²⁷ This is not necessarily the result of personal prejudice on the part of the park owner or manager; alleged instances of discrimination against minorities, if indeed they do exist, may stem from pressure exerted by the park residents.²⁸ However, the absence of minorities from mobile home parks may not be due solely to discrimination. Living in mobile home parks may not be a part of the life-style or aspirations of these individuals, or existing parks may be located in areas which do not meet the regionalized demands initiated by these minorities. Where parks may be useful in meeting the demand of these minorities (e.g., in metropolitan areas), any number of restrictions external to the parks themselves also exist. As Drury states:

"If more minority groups and hard-core poor are to be housed in this lower-cost housing, drastic changes will have to be brought about in both marketing and park controls which have traditionally worked to restrict them."²⁹

Both the subject of discrimination and that of housing lower-income groups in mobile homes require further study. Results of surveys showing what types of individuals are choosing to live in the new park developments would add greater depth and meaning to the assessment of the demand for mobile housing.

Park regulations and rules can be restrictive, offering little protection for the tenants. The following are some extreme examples that have been reported: the possibility of eviction for having a unit that is considered too old to remain in the park;³⁰ the requirement of uniformity in awnings, skirting, etc; additional charges for overnight guests and for children to reside in the park; the obligation to use the same fuels as those already hooked up to the park, i.e., gas or oil; even the requirement that residents use the manager's choice of concessionaires (e.g., milk deliveries). To compound the vagaries of such regulations, the park tenant, once having gained admission to the park, may find that he has no lease and is thus a "tenant at will."³¹ These examples of park regulations are not the norm, but rather the exception. Although PMHI has no evidence to support the frequently-voiced need for development of greater consumer protection through landlord-tenant laws, it is imperative that the

residents' complaints, which are presently widely publicized and thus are tarnishing the mobile home industry's reputation, be investigated. (Perhaps this could best be accomplished by the Mobile Home Manufacturers Association.) If the complaints are validated the situation should be rectified. However, if there is no indicative evidence this fact should be voiced.

3.3.3 Managers and Dealers: Problems

The basic concern of the manager with the community-at-large appears to be that of dealerships and concessions. Park owners and managers may also act as dealers, thereby broadening their responsibilities to include the screening of applicants, as well as to supplement their incomes. Initially, this practice appears harmless except when a developer acting as dealer requires that the prospective tenant purchase his home from himself, often at a higher cost.³² These developers justify their actions by the desire to control the kind of mobile home which is to be brought into the park, i.e., to maintain a uniformity in appearance, model and age. Other explanations are the need for "insuring the economic feasibility" of the mobile home development project, as well as overcoming local opposition by controlling park appearance.³³

In summary, there are a number of potential conflicts which may prevent a manager from playing an "ideal" role and from forming an "ideal" manager-tenant relationship. This, however, is not a situation that occurs only in the mobile home park, but is true of any form of rental housing as well.

C.

POTENTIALS
OF
PARK DEVELOPMENT AND OPERATION

One of the primary recommendations of the PMHI study is that mobile homes be treated like conventional housing with regard to consumer financing, taxation, and land use controls. Mobile homes have become another legitimate form of permanent housing and should not be excluded from residential neighborhoods and restricted to mobile home parks.

If, however, the widely practiced restriction of mobile homes to parks cannot be swiftly abolished, the mobile home industry could and should turn this restriction to its own advantage. The prevalent confinement of the industry's product, and hence its consumers, to the mobile home park need not be a liability in industry development. If it is used creatively, the park concept can be an asset in the development of mobile housing communities. In many respects, the mobile home park is still a "legal vacuum", not subject to many regulations governing traditional residential developments. Because the park can thus escape the restrictive nature or redundancy of many of the conservative controls operating within the traditional housing industry, innovations in housing design and park operation can be achieved more easily and with better cost performance than is possible in conventional housing development. An analogy is the "Made in Germany" labeling requirement which was imposed upon German industry by the Allies after World War I in order to inflict the stigma of inferior products. The Germans, however, succeeded in achieving the opposite: they built the "Made in Germany" into a recognized trademark of excellence. Similarly, the mobile home park concept can tactically be used as a protective legal umbrella for innovation; the industry can exploit the "legal

vacuum" and turn the negative image of the mobile home park into an image of excellence in serving housing needs.

Daring innovation must be accompanied by formulation of rigorous development and construction standards in order to insure excellent design, sound construction, and efficient land use. The absence of standards has contributed to the poor public image of parks, the bias against them, and their consequent relegation to non-residential land, side by side with factories and junkyards. A set of park development standards (ANSI A119.3) has been formulated, but the scope of ANSI A119.3 is not wide enough to accommodate innovation of the order suggested above. Furthermore, as of June 1976, ANSI A119.3 has been officially adopted by fewer than ten states, although other states do use it as a guideline. The further development and adoption of such standards and the introduction of conventional mortgage financing and real property taxation will upgrade park development and increase community acceptance of parks -- an essential step toward the "trademark of excellence" concept.

If both innovation and development of standards are pursued, there is no reason why the mobile home park industry could not become a market leader, in the vanguard of the development of creative, user-responsive housing. The advantages to the industry of a radical change in direction are great: public opinion of mobile homes would improve and the market for mobile homes would expand enormously.

An analysis of emerging trends in park development is a good starting

point for a discussion of development potentials. The present trend is toward larger parks, developed with larger amounts of capital than older parks and operated by professional managers. New parks attract larger families because they are built at a lower density and accommodate larger units such as double-wides. Due to rising land costs, developers have to look for more remote park locations in order to maintain these low densities at affordable rentals. Large professionally-run parks will have a wide range of community services which fulfill luxury wants that often far exceed essential community needs. These new high-quality parks are attracting higher income groups to mobile home living. Another attraction of new parks is the improvement in site design to insure greater privacy at higher densities.

Trends toward development of parks with low densities, rural locations and luxury services may be productive at present, but they do not indicate where the greatest potential for growth lies. The future demand will be for low-cost high-density housing in close-in locations, due to rising land and transportation costs. Trends toward large heavily-capitalized parks with design innovations for high-density siting, efficient planning and a complete range of community services will best respond to this demand. The following pages describe some of the key ideas that we suggest for future park development -- ideas that are all based on the general notion of exploiting a "legal vacuum".

1. A Range of Living Environments.

If the industry is to significantly expand its market to include more

of the general population, it must offer a wide range of living environments instead of the limited range it offers today. A variety of environments means variety in park locations, housing sizes, housing types and community types.

In addition to low-density suburban-rural parks, there should be high-density urban parks. The monolithic character of parks should be relieved by a variety of housing types. Mixes of single-family, clustered and stacked housing in various densities would encourage the development of a balanced community of young and old, with small and large families. Such mixes are usually difficult if not impossible to achieve under conventional zoning but could be possible by tactically using the park concept as a legal vehicle, i.e., by exploiting the "legal vacuum".

Thus mobile homes can not only perform many of the functions of conventional housing, but they can perform different creative functions within the park concept. A fully developed model of a future park might be comparable to a small town in density, size and self-sufficiency, with the advantages of rapid prefabrication and low cost. In rapidly growing cities where mobile homes play an important role in expansion, parks should not be merely a housing adjunct to that expansion, but the actual organizational basis for new communities.

2. High-density Urban/Suburban Parks.

Mobile home parks with higher densities will be able to compete with

conventional housing such as town houses and walk-up apartments for higher-priced desirable residential land. But if parks are to become an important element in urban housing, their present sprawling suburban character must be radically altered. The potentials for clustering and stacking (see the section on "The Product Today and Tomorrow in Volume I) demand that the mobile home no longer be considered as a separate single family house but as a building component capable of achieving many different architectural configurations. Consequently, a close coordination between unit and site design will be needed to insure privacy as the individual lot shrinks in size and importance and the park assumes a tight urban form. Steps have been made towards this type of coordination with zero-lot line and cluster site plans (see pp. 80-95.)

3. Utilities and Services.

A greater emphasis is being placed on efficient planning of utility and road systems, but as yet there are no innovations which would reduce the excessively long site development and construction phase, and erase the dichotomy between traditional on-site construction and off-site unit prefabrication. What is needed, at least as an option, is a system for site preparation that is the logical counterpart to mobile home production. The mobile home is advanced, low-cost and flexible, while the infrastructure on which it rests is conventional, expensive, permanent and inflexible.

Site drainage and road systems as presently installed require a permanent alteration of the landscape by conventional methods. Innovation is conceivable, however, in the utilities system. The various services - water, sewer, electrical, telephone, gas, steam heat, etc. - could be combined in large prefabricated pipes which would be laid out above ground, topped by pedestrian walkways. Trenching and refilling for each individual service would be eliminated, thereby reducing on-site costs and disturbance to the landscape. Once initial grading and roadwork are completed, the prefabricated components for a complete utility grid would be transported to the site and set in place, followed by the placement of the mobile homes. If rising land values and exorbitant taxes were to dictate the removal of the mobile home park, the utility grid's components could be disassemble and transported along with the mobile homes to a new location. The land could then revert to other uses.

4. Energy.

The self-contained nature of the mobile home park would make appropriate the development of a total energy system as part of the prefabricated utility system. Such systems are now used by institutions with large physical plants and by some small communities in order to increase efficiency through the recycling of waste heat. The park would also be an ideal testing ground for solar energy and other alternative sources which are especially suitable for powering a small community.

5. The Total-Service Community

The mobile home park has the potential to be largely self-sufficient in social services. The mobile home industry has already developed a tradition of "housing as a total service", especially in serving the special needs of retirees. When a person buys a mobile home, he or she is often buying a package for living, including space in a park complete with basic utilities, amenities and a lifestyle. At present, the concept of total service is expanding only in the luxury market, where the mobile home park approximates a country club. The real potential, however, lies in providing the general population with essential services. In addition to presently provided services such as trash collection, a laundry and a community center, a mobile home park might include a day-care center, stores, a health clinic and recreation facilities.

A complete range of services implies large-scale development and professional management, accompanied by higher costs to park residents. In order to determine if the concept of total service is viable, the industry should conduct research into the needs of the present and potential mobile home populations and analyze for which services people are really prepared to pay. While a total service community might duplicate services in an already developed urban area, it would be vital in an isolated area where the community infrastructure is weak.

D.

SUMMARY

A profile of the mobile home population provides a good basis for understanding how mobile home parks have responded to user needs in their development and operation. The mobile home industry still serves only a limited segment of the population: primarily blue-collar workers and people not in the labor force, including students and retirees. The most important characteristic of these groups is their below-average income, and the industry's greatest success has been to provide home ownership for these groups without public subsidy. Noticeably under-represented in the mobile home population are white-collar workers, large families with older children, and minorities. The industry can expand its market to include more of the general population, and one way in which this expansion can take place is through further development of the park concept.

The present park responds to user needs by offering a lifestyle that combines individual, private ownership (of the mobile home unit, not the site) with a sense of community, at lower cost than traditional single-family housing. Park design emulates the conventional single-family suburban subdivision; the importance of the suburban model can be seen in the strong desire of park residents for larger lots and lower densities. In contrast, townhouse residents do not seem to stress lower density as a desirable improvement. Even though parks and townhouses often have the same density, the user expectations which determine their designs are very different.

User needs also determine park location. The low-density of parks is suitable for low-cost housing on the urban-rural fringe, close to blue-

collar employment centers. At present densities, mobile home parks cannot compete with conventional housing for high-priced land in close-in locations. Zoning restrictions and the inability to compete financially with conventional housing will be obstacles to industry growth if the demand for centrally-located housing increases.

The recent trend toward larger parks which can accommodate larger units is a stimulus to industry growth. The greater investment required for larger parks often results in better park design, more community services and overall higher quality. But the lower density of new parks is incompatible with rising land costs. As an option, higher-density parks should be introduced. Increases in park density must be accompanied by design modifications of the unit and improvements in the quality of out-door space in order to insure privacy. At present, the independent design of site and unit is an obstacle to the development of high-density parks. The answer is not to custom-design each unit for a particular site but to develop schemes for factory production of building components which can be placed on the site in coordinated patterns, such as clusters.

Site development and the construction of utility systems is based on the methods used in conventional housing, and improvement in this area is limited to increasing efficiency of design and of construction scheduling. The dichotomy between mobile home production technology and the traditional methods of site development remains a major restraint to improved cost performance.

The sense of community, the small-town atmosphere of parks that many residents enjoy is often augmented by community facilities, especially in parks for retirees. However, luxury facilities are stressed more than essential services or services oriented towards families.

The emerging trends in park operation are related to some of the trends in development. Most significant is the trend toward professionalism in management-- the result of large-scale park development which is increasingly undertaken by major corporations. The new breed of manager has greater responsibility and authority and tends to operate more efficiently than managers of older and smaller parks. Through his authority in park maintenance and regulation, tenant selection and mobile home resale, the manager exerts a considerable influence on the physical appearance of the park and on the lives of the tenants.

The danger of the manager's authority lies in its potential abuse. The mobile home industry should make every effort to expunge abuses in park operation. Although they are clearly exceptions in the park system in general, cases of mismanagement tend to be widely publicized and contribute to a poor public image of mobile home parks. In the past, the mobile home industry's self-policing has successfully weeded out fly-by-night manufacturers. This same energy should now be directed toward park operators who threaten to tarnish the excellent reputation that the mobile home park business deserves.

There are numerous obstacles to further evolution of the park concept,

including the marketing focus on only limited segments of the residential population, the dogma of suburban-subdivision-style park design, and the lack of innovation in site development technology. If these restraints can be overcome, there is an enormous potential in park development.

One central issue in all aspects of park development is density. It is necessary to establish the option of high-density mobile home living even though the acceptance of high density parks may require a fundamental change in attitude on the part of those groups that own mobile homes today. On the other hand, high-density urban parks will attract new consumer groups including white-collar workers and minorities. Changes in density and the consequent changes in park location and design will enable the park system to offer a wide range of living environments. With innovations in the provision of utility services and social services, the mobile home park has the potential to become a self-sufficient community which can be erected rapidly and inexpensively. This future type of mobile housing community will attract financially stronger corporate developers and should result in more sophisticated and responsive professional management.

Also in great need of development is the fundamental alternative to the park concept: the placement of the mobile housing unit on individual lots in traditional residential subdivisions. Already, the mobile home is becoming indistinguishable from the traditional single-family home. With further design efforts channelled in this direction, the industry should soon be able to convince the courts that restriction of this "new" mobile home to parks is unconstitutional.

Once the industry can offer three basic options for placement of mobile housing--low-density parks, high-density parks, and placement on individual lots-- it will open truly giant new markets. Bringing low-cost housing within the reach of more households is both an unusual business opportunity for the industry and an effective, private-sector response to one of our most pressing social needs.

E.

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COST/PRICE ANALYSIS

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A.

INTRODUCTION

The experience of Project Mobile Home Industry staff members, who have designed many thousands of park spaces, was also utilized.

B.

THE PRESENT SITUATION
AND EMERGING TRENDS

1.

Development Costs

Project Mobile Home Industry's (PMHI) analysis of mobile home park development costs addressed four main areas: land, zoning and fees, design, and construction. Together, these components represent the primary direct costs of building a mobile home park. These development costs were used as a basis for projecting probable lot sales prices, the cost to the occupant of a mobile home subdivision.

Sources of cost information included industry publications, but professional design firms and park managers provided the most meaningful data. Design firms submitted drawings, final cost estimates, and bid information for 30 completed projects. One third of the park managers responding to the PMHI Park Survey (PMHI/PS) provided cost information. The total sample of 74 projects varied in location, size, density, age, scope, and quality. Ten conventional low-density housing projects were included in the sample to permit comparison with mobile home parks.

A standard cost format was developed to enable comparisons of cost information from the various sources. PMHI recognized that partial responses were inevitable, since sources might have access only to some of the cost data requested. Accordingly, the format identified major factors affecting costs, particularly the number and size of construction features included in the project. This approach made it possible to compare the cost of various components - if an item was left blank, it was assumed that the feature was not provided or was paid for by someone else. For example, although only half of the

30 projects in the designer survey had gas systems, it was still possible to derive the cost of a typical gas system. Most important, the approach clearly identified what items were provided in each project for a given amount of money.

The responses confirmed the necessity of such an approach. The primary difference between a park that costs \$3500 per space and one that costs \$5500 per space was the amount of preparation work. The "quality" parks could have been built for \$2000 per space less simply by deleting selected desirable features, without changing the design.

The quality and cost of basic park components, such as water systems, did not vary significantly; the biggest differences appeared in the number and quality of desirable features, such as landscaping, fencing, and storage sheds. However, several responses did omit costs for such basic features as electric primary lines, access roads, or sewage plants. In many parks, these items are provided by public agencies; connection fees or taxes for these items reflect to some degree the cost of providing these services. Where actual bid prices were available, final design estimates were adjusted to reflect the cost of each component more accurately.

All cost estimates were adjusted to eliminate time and location variables using Boeckh residential cost indices.¹ These indices reflect actual inflation in residential construction in specific cities. Inflation rates varied from two percent to 15 percent depending on year and location, and averaged about five percent. Although Boeckh indices reflect inflation

for sitework and dwelling units in conventional construction, inflation rates reported by the Mobile Home Manufacturers Association for mobile home parks are comparable.²

The first step in using these indices is to update costs to a common date, to indicate the current cost of replacing a park exactly as designed in its actual location. June 1973 was used in this study. The second step is to derive the hypothetical cost of building each park in a common location, Washington D.C. in this analysis, by comparing cost indices of the actual location to the common location. Older parks yield surprisingly high "replacement costs" in this method of analysis.

The same basic approach was used to update and adjust costs reported by park managers. The 34 parks in this portion of the sample were actually built in 69 different increments, each of which were updated separately.

After normalizing costs with respect to time and location, as described above, costs for each component were then averaged. A final adjustment was made for selected items where the sample was too small or atypical in some respect.

1.1 LAND COSTS

Land costs vary tremendously, from about \$300 to \$35,000 per acre. Land for a typical park cost about \$5000 per acre in 1973, or \$800 per space at a density of six units per acre (the industry average).

PMHI's attempt to determine land prices empirically met with limited success, since few land developers responded to surveys. However, land costs are a major influence on the location and density of mobile home parks. Paradoxically, the low cost of a mobile home indirectly sets an upper limit on the price most users will pay for its site.

In rural locations, per-space land costs remain relatively small, and lower density parks can still be profitable. Even at \$1000 per acre, a density of two units per acre yields a very reasonable land cost of \$500 per space.

Land in prime suburban locations near major metropolitan areas will typically cost \$10,000 per acre, depending on parcel size, amenities, and surroundings. Even though most park developers seek lower-cost land on the suburban fringe, land prices are the prime reason why mobile homes in suburbia are rarely sited at typical single-family densities (three or four units per acre). At \$10,000 per acre and \$6,000 per space for site development, a density of three units per

acre will yield \$9,300 per space for a developed site, or \$1,500 more than the median 1973 retail price of a mobile home. At six units per acre, the developed land price would be approximately equal to the average 1973 retail price of a mobile home.

To justify high land costs, a park in a prime location often will be oriented toward double-wide and expandable units. Continually increasing land costs will encourage mobile home developers to develop high density parks. However, high density conventional parks are likely to be unattractive to many mobile home owners. Developers may increase park densities by utilizing present higher-density forms of housing. For instance, current forms of cluster designs can make single family housing feasible at densities of up to ten units per acre.

It is still possible to buy land at low cost in far-out locations, but trends point strongly toward higher land prices in locations near employment centers and added pressure to develop higher-density forms of mobile housing. If the industry does not anticipate the impact of land price escalation, this trend will severely restrain industry growth.

1.2 ZONING COSTS AND FEES

Zoning costs and fees must be estimated for specific locations. Costs range from almost nothing in rural areas to perhaps \$2500 per space if re-zoning is difficult and utility tap fees high.

Parks built in many rural areas are not subject to zoning, building permits are of nominal cost, and there are no connection fees because there are no municipal utility systems. However, these potential savings may be offset by higher site development costs.

At the other extreme, zoning changes may take months or years and involve preparation of costly public displays and participation in public hearings or court cases. The emerging "no-growth" stance of many communities faced with school or environmental problems may delay any new project, especially a mobile home park. At best, an extensive environmental impact report will be required to outline the advantages and disadvantages of the project to the community. A strong "no growth" attitude can result in exorbitant charges for utility connections or government services even after zoning is approved. In one park near Washington, a developer was advised that a water connection would cost \$1000 per home and a sewer connection \$1200, and it took a successful court case to reduce these figures.³

The difficulties of coping with zoning and environmental problems are substantial. It has been estimated that a zoning court case at the county or circuit court level averages \$5,000 to \$10,000, plus the indirect cost of a three month to one year delay while waiting to get to court. An appeal may add six months to a year, and bring the total court cost to \$30,000.⁴ Although this would only be \$200 per space for a typical 150-space park (if the case is successful), it includes only direct costs.

Professional presentation drawings, impact studies, and other exhibits during the public zoning hearings can easily cost another \$30,000. These costs, if required, are supplemental to the costs of design documents prepared for construction purposes. Another significant indirect cost of zoning and court battles is the impact of delay on financing and construction costs. Front money for land and design documents yields no return until the park is built. A one-year delay will add at least five percent to the cost of construction.

Initial contacts with zoning officials are important first steps for the developer, both in evaluating the chances of obtaining a zoning change as well as estimating its cost. Government officials will also provide information about documents required for review and typical connection charges.

1.3 DESIGN COSTS

Professional design services for a park of 150 spaces will average \$200 per space. Smaller parks will cost more per space because a lower design budget will not attract many firms and a significant portion of the design work is preparation of details and specifications, which are the same regardless of park size. The size factor will be minimized if details and specifications from previous projects can be adapted.

Design contract variations are numerous and the type of contract can significantly affect costs. The range of minimum AIA fees for a fixed-fee housing contract based on a percentage of construction cost is shown in Figure 1. Even if the construction cost is held to \$3500 per space, design costs in this form of contract will exceed \$200 per space; as the construction goes up to \$5500 per space, design costs virtually double. The same increase in design costs will occur as inflation increases construction costs, even though no additional design effort is required. However, the fees shown reflect minimums for design of conventional housing, and many firms will charge less if only sitework is involved. Still, it may be to the advantage of the developer to negotiate a contract on some basis other than percentage of construction cost.

Actual design fees reported to PMHI ranged from \$50 to \$350 per space.

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FIGURE 1: MINIMUM AIA FEES, REPETITIVE HOUSING, MASSACHUSETTS
DESIGN COSTS PER SPACE

R.S. Means, Construction Cost Data, 1972.

The smallest parks had the highest per-space design costs for a given level of design work. Many small parks are not designed professionally, reducing costs. The basic layout may be designed by the owner or developer and built with a minimum of detailed drawings and specifications. Although this technique may still be feasible in rural locations, it is increasingly less common for parks in suburban areas.

The attitude of the community toward the park will also affect design costs. If a tough zoning battle is anticipated, nothing less than a first-class professional design effort, with attractive presentation drawings, will be required to convince the community that the park will be an asset. Environmental impact statements are normally prepared by professional firms and will increase the design fee.

1.4 CONSTRUCTION COSTS

The number of features included in a project affects costs more than any other factor. The time span of each construction phase and the location of the park are significant. Construction costs are also affected by site conditions, design efficiency, and the quality of materials. Within the density range of most new parks (3 to 8 units per acre), density has no significant impact on park construction costs. In this range density primarily affects per-space land costs. It should be noted that all cost data presented in this item (1.4) -- both in the text and figures -- exclude the cost of land, design, and zoning fees.

Construction costs reported to PMHI for 1973 ranged from \$700 to \$68,000 per space. A "typical" 150-space park in Washington D.C. cost \$3,500 per space and a "quality" park cost \$5,500 per space, excluding community facilities. Costs for "outdoor" accessories, normally paid by the mobile home owner rather than the park developer, add about \$1,500 to the cost of a single-wide mobile home.

Total construction costs for parks vary with size and quality. A small 50-space park with minimum features will cost \$125,000, and a high-quality 500-space park will cost \$3-million. The average size new park, about 150 spaces, often costs less than \$1-million.

Despite the rapid increase in park size and park features in recent years, park development still attracts smaller investors and builders than conventional housing. The relatively small bid package, in turn, limits savings possible from volume purchasing and other economies of scale that apply to on-site construction.

The effect of the total amount of preparation work on park costs is clearly shown in Figure 2, which illustrates typical 1973 costs for each major construction feature in a 150-space park near Washington D.C. These costs were derived by updating actual costs for 30 different projects, and then averaging costs for each component. Three of the projects in the sample were the mobile home parks described in the MHMA publications "Mobile Home Park Plans and Specs," Volumes 1 and 2. The total cost, \$5,500 per space without community facilities, includes features comparable to those in moderate-cost subdivisions. Approximately \$2,000 of the total is for such "optional" features as curbs and gutters, walks, a gas or oil system, street lights, storm drains, trees and shrubs, patios with privacy fencing, and pads for storage sheds. Clearly, it would be possible to build a \$3,500 park without changing the design or compromising the quality of the park's basic features. However, it is apparent that the overall quality of the park would suffer from deleting these "optional" features.

The typical mobile home park does not provide all of the features shown in Figure 2. For example, the items actually provided in 13 of the commercial parks in the sample are shown in Figure 3. Only 6 of the 13 parks had gas

ITEM	COST PER SPACE	%
COMMUNITY FACILITIES	\$ 500	8.3%
\$75,000 total		
UNUSUAL COSTS	150	2.5%
Utilities	100	
Roads	50	
SITE PREPARATION	400	6.7%
PAVING	1250	20.8%
Curbs/Gutters	275	
Parking/Driveways	225	
Streets	500	
Walks	250	
UTILITIES	2375	39.6%
Water	500	
Sewer	525	
Gas	300	
Electrical	550	
Street Lights	100	
Storm Drainage	400	
LANDSCAPING	500	8.3%
Grass	250	
Trees/Shrubs	250	
FENCING	200	3.3%
UNIT ACCESSORIES	625	10.5%
Pad/Tie Down Anchors	350	
Storage Shed Pads	60	
Patios	215	
TOTAL: With Community Facilities	\$6000	100.0%
Without Community Facilities	\$5500	

SOURCE: Estimate Based on Responses to PMHI Letter to Park Designers/Developers, 1973

FIGURE 2: COST ESTIMATE (EXCLUDING LAND COST), MOBILE HOME PARK COMPONENTS, 150 SPACES, 5 UNITS PER ACRE WASHINGTON DC, JUNE 1973

ITEM	AVERAGE COST		COST RANGE		# PARKS WITH ITEM
	\$ PER	SPACE	LO	HI	
COMMUNITY FACILITIES	\$ 88		\$ 453	\$ 603	
Community Hall		N/A			3
Laundry		N/A			2
Pool		N/A			1
UNUSUAL COSTS	96		0	947	
Utilities		50	0	650	1
Roads		46	0	281	5
SITE PREPARATION	213		87	361	13
PAVING	863		385	1898	
Curbs/Gutters		145	145	328	8
Parking/Driveways		291	65	468	12
Streets		405	130	1027	13
Walks		22	43	75	5
UTILITIES	1458		800	2635	
Water		412	158	518	13
Sewer		537	295	841	12
Gas		69	63	204	6
Electrical		139	108	305	9
Street Lights		40	49	179	6
Storm Drainage (UG)		261	127	588	8
LANDSCAPING	85		99	273	
Grass		53	67	150	7
Trees/Shrubs		32	32	123	6
FENCING	42		12	244	5
UNIT ACCESSORIES	557		301	1997	
Pad, Tie Downs		254	129	958	10
Storage Sheds		200	60	793	7
Patios		104	112	246	8
OTHER COSTS	43		4	192	6
TOTAL SITE DEVELOPMENT	\$3445		\$1733	\$9150	
LEAST EXPENSIVE PARK	\$1798				
MOST EXPENSIVE PARK	\$4427				

SOURCE: NEMA Plans and Specs, Volumes 1 and 2, 1969, Herbert Behrend and Daryoush Ghorbani (3 Parks)
Responses to FMHI Letter to Park Designers/Developers, 1973 (10 parks)

FIGURE 3: COMPARATIVE SITE DEVELOPMENT COSTS (EXCLUDING LAND COSTS)
13 COMMERCIAL MOBILE HOME PARKS
WASHINGTON, DC, JUNE 1973

systems, eight had curbs and gutters, five provided walks, and six included some trees and shrubs.

The range of costs for each component in this sample is also shown. The component costs in Figure 3 reflect the average for the entire sample, regardless of how many parks had a given item. The total cost of the commercial parks ranged from \$1,798 to \$4,427 per space, and averaged \$3,445 per space. However, the average cost for these same parks would have been at least \$1,000 more if all parks had provided all items, and \$2,000 more if the items provided had been comparable in quality to similar features in conventional subdivisions or top-quality mobile home parks.

The range of 1973 costs reported for 34 other commercial parks in PMHI/PS was from \$700 to almost \$10,000 per space, clearly indicating differences in scope as well as quality. The average 1973 replacement cost for these parks was \$3,220 per space if built in their original locations, and \$3,300 per space if built in Washington D.C.

For a number of reasons, these costs are surprisingly high. PMHI recognized that most managers could not provide detailed estimates and would generally understate actual cost by omitting major items. Thus, actual replacement costs for these parks are probably much higher than \$3,300 per space. The age of the parks, built from 1948 to 1974, normally would suggest that replacement costs would be low, since design standards of new parks are generally higher and densities lower. The sample did not confirm any cost

trends regarding park age or density (Figures 4 and 5). Some of the oldest, highest-density parks had relatively high replacement costs. One park built in 1956 would cost \$8,130 per space to rebuild in 1973. Small park size may be one factor increasing the cost of older parks, although the sample also showed no obvious trends according to park size (Figure 6). The only indication of the cost impact of park size in the sample was that the four parks with the highest cost per space were all smaller than 25 spaces. The lack of park age, density, and size trends is due in part to the inaccuracy of the source data, but the major factor is that the scope and quality differences in the sample had a much greater impact on cost.

Assuming scope and quality are comparable, there is no question that park size and density have an impact on costs, although park size is the most significant factor. Actual bids for another sample of mobile home parks that were designed to approximately the same quality standard indicate that a 25-space park will cost almost twice as much per space as a 200-space park of comparable quality (Figure 7).

The impact of park density is much less significant, although not negligible. The diagram in Figure 8 compares typical lots at densities of four, six, and eight units per acre, with 20 percent of total land area allowed for streets and common community/recreation areas. Assuming a constant lot depth of 110 feet, increasing the density from 6 to 8 units per acre will reduce lot width by about 13 feet. This will reduce costs about \$350 to \$480 per space, depending on street width, curb and gutter design, walk width, utility pattern, extent of grading and grass, and other factors. For illustration purposes,

YR BUILT	# SPACES	\$/SPACE	YR BUILT	# SPACES	\$/SPACE
1948	42	\$3280	1969	19	\$1437
1952	18	\$3180		23	\$1787
1954	46	\$4660		55	\$3725
1955	89	\$5135	1970	6	\$1658
1956	53	\$2555		12	\$2072
	9	\$8130		70	\$2665
1957	51	\$1095		11	\$3155
	6	\$1730		59	\$3372
1959	26	\$1890		10	\$6200
	37	\$2177		6	\$7670
	68	\$5780		24	\$9847
1960	17	\$ 567	1971	13	\$ 862
	20	\$2413		7	\$1599
	10	\$5793		120	\$1866
1961	30	\$3351		17	\$2964
	12	\$4745		30	\$3732
	31	\$5203		150	\$5600
1962	25	\$ 734	1972	30	\$ 454
	4	\$ 903		16	\$ 660
	5	\$2570		68	\$1086
	8	\$4819		51	\$2215
	4	\$5508		150	\$3516
1963	54	\$1838		326	\$3564
	112	\$2820		20	\$5280
	7	\$4834		500	\$5913
1964	190	\$3684	1973	6	\$ 833
1965	55	\$2662		17	\$1000
1966	40	\$1564		10	\$1300
1967	12	\$ 788		68	\$1470
	58	\$2392		16	\$1562
1968	30	\$1243		110	\$3100
	90	\$2818		86	\$3488
	23	\$3439	1974	90	\$1410
	54	\$4146			

AVERAGE, ALL 34 PARKS \$3220
 AVERAGE, 69 INCREMENTS \$3042

SOURCE: FMHI Park Operator/Owner Survey, 1973

FIGURE 4: PARK AGE/COST "TRENDS" (EXCLUDING LAND COSTS)
COSTS PER SPACE: 1973

	<u>DENSITY, # SPACES PER ACRE</u>						
	4	5	6	7	8	9	10 or more
LOW	\$454	\$788	\$660	\$1468	\$1243	\$1410	\$1086
HIGH	5793	4146	4265	5913	5600	9847	8130
AVERAGE	2782	2211	2208	2884	3645	4015	4624

Source: PMHI Park Operator/Owner Survey, 1973.

FIGURE 5: DENSITY/COST "TRENDS" (EXCLUDING LAND COSTS)
COSTS PER SPACE, 1973

	<u>PARK SIZE, # SPACES PER CONSTRUCTION PHASE</u>					
	0-25	26-50	51-75	76-100	101-125	126-Or More
LOW	\$567	\$454	\$1086	\$1410	\$1866	\$3516
HIGH	\$9847	\$5203	\$5780	\$5135	\$3100	\$5913
AVERAGE	\$3110	\$2755	\$2690	\$3215	\$2595	\$4425

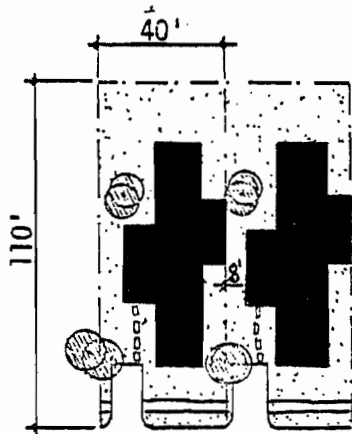
Source: PMHI Park Operator/Owner Survey, 1973.

FIGURE 6: PARK SIZE/COST "TRENDS" (EXCLUDING LAND COSTS)
COSTS PER SPACE, 1973

FACTOR	PARK SIZE	PARK COST
1.0	200 Spaces	\$5000/Space
1.1	150 "	5500 "
1.2	100 "	6000 "
1.4	50 "	7000 "
1.7	25 "	8500 "
2.0	15 "	10,000 "

Source: Responses to PMHI Letter to Park Designers/Developers, 1973

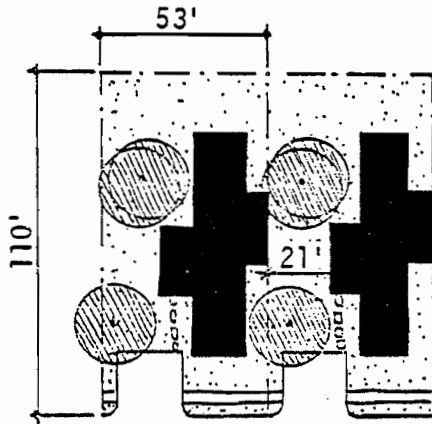
FIGURE 7: PARK SIZE/COST TRENDS (EXCLUDING LAND COSTS)



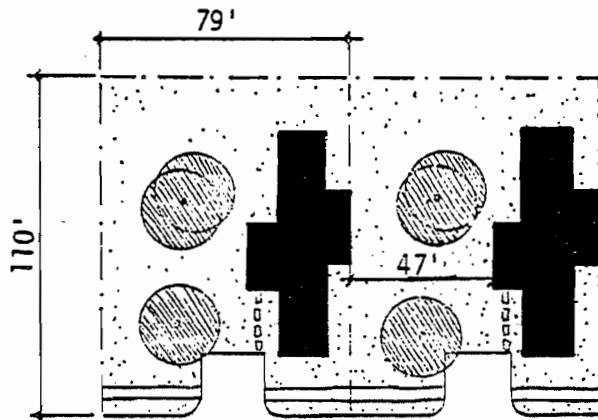
TYPICAL LOTS

20% LAND AREA: STREETS/COMMUNITY
\$30-\$50/LF STREETS/UTILITIES
\$.10/SF GRADING/GRASS
14 x 70 SINGLE-WIDE w/PATIO COVER
AND EXPANDABLE ROOM OR DECK

DENSITY: 8 UNITS/ACRE
4400 SF LOT



DENSITY: 6 UNITS/ACRE
5800 SF LOT
\$350-\$480 MORE THAN 8 UNITS/ACRE



DENSITY: 4 UNITS/ACRE
8700 SF LOT
\$675-\$950 MORE THAN 6 UNITS/ACRE

FIGURE 8: TYPICAL LOTS

the estimated savings are based on \$50 per linear foot (\$25 per side) for 22-foot streets, a four-foot walk on both sides, curbs and gutters and parallel utilities. The cost per linear foot would be about \$30 (\$15 per side) if walks, curbs and gutters, and a gas system were deleted. The space between units decreases significantly as a result of such an increase in density, from about 21 feet to 8 feet for single-wide mobiles with patios or projections on both sides. In most markets, the savings from such a small increase in density is not justified.

Within a wider range of densities, costs vary more. Decreasing density from 6 to 4 units per acre, with the same lot depth, increases the space between units to 47 feet at a cost premium of \$675 to \$950 per space. At such low densities, costs can be minimized by limiting grass area and increasing lot depth or common open space, rather than increasing lot width. Lot width is a more important cost variable than lot size (or density) per se. In many cluster designs, lots are not as clearly defined and may be neither parallel nor perpendicular to the street. In such designs, the critical cost factor is not the density, but the length of streets, utilities, and walks required to serve each cluster of units. This is one measure of design efficiency.

Design efficiency is a more important cost factor than density. The density of a park can be relatively low, but costs will remain moderate if streets and utilities are designed to minimize the length

of runs. This does not necessarily mean that narrow lots on both sides of the street will yield the most efficient design - many cluster designs compare favorably with conventional linear designs in terms of street and utility length. The conventional linear designs can be used as a yardstick to measure the performance of other alternatives. For example, "single-loaded" streets with units on only one side, or collector streets with no units facing them, almost always add costs. Utility lines which serve isolated units tend to be more expensive than lines which serve compact clusters of units. Wide lots, particularly those for units having the long (entry) side facing the street, add considerably to utility and street lengths. Individual off-street parking, with 2 cars per unit, will be more expensive than off-street parking for one car and common parking areas for guests and second cars (total, $1\frac{1}{2}$ cars per unit). Surprisingly, on-street parking for all cars is usually more expensive than narrower streets with all parking off-street. All of these examples illustrate design decisions that have a cost impact. The advantages to be gained by reducing efficiency must be weighed against this cost impact.

Site conditions affect costs in varied ways. On a regional scale, the location of the project determines the availability and costs of materials and labor. The impact of these variables for a given site can be estimated for specific locations by referring to commonly-used residential cost indices, such as the Boeckh indices.⁵ These indices permit direct comparison of current costs in major US cities with a

common bid date and location, such as PMHI's data base (Washington, DC, June, 1973). On a local scale, the proximity of the site to access roads and utilities is significant. Within the site, natural features such as topography and vegetation, water table, soil conditions, and availability of desirable natural features affect costs. From a regulatory point of view, the site may be subject to zoning and building code requirements that increase costs. Taken together, these factors can increase or decrease costs 25 percent or more.

The quality of materials is another significant cost factor, but it is extremely difficult to quantify. Although the material variables in sitework are more limited than those in dwelling unit design, the cost of obtaining a given level of performance varies from site to site. For example, roll-edge asphalt curbs and gutters may suffice in Arizona, whereas Seattle could demand a conventional 6" concrete curb to accomplish the same job - control water flow. Plastic pipe is almost always less expensive than cast iron (particularly where cathodic protection is required by soil conditions), but debates on their comparative short and long-term performance can extend long into the night. Asphalt and concrete streets are examples of materials that differ in cost and performance, depending on location; in some areas double bituminous surface treatment will be adequate. The extent and type of landscaping, quality of patio and fencing materials, tie-down anchors, and gravel pads or concrete runners are further examples of material variables that affect costs. In many cases,

selecting the most cost-effective option is not simple - both initial and long-term costs must be considered, and materials may be related to one another. For example, concrete runners are normally more expensive than gravel pads, but it may be easier to provide an anchor for tie-down straps in concrete than to bury screw-type anchors in the soil. Each material choice must be considered as part of a system of choices that relate to one another.

The scope and quality of community facilities feasible in a park is directly related to park size. Increased demand for such facilities has been a primary factor in the trend toward larger parks. Figure 9 illustrates the total funds available for community facilities for parks of various size, depending on the amount spent per space. The typical new park of 150 spaces will have \$75,000 available for community facilities at \$500 per space. This amount is just enough for a small laundry, community center, and pool, which are almost mandatory for a park to qualify for a 4 or 5-star Woodall's rating. For additional amenities to be feasible, either the park size or the cost per space must increase.

The costs of "outdoor" accessories are normally paid by the mobile home owner and, strictly speaking, are not part of the cost of a park. They do, however, add about \$1500 to the cost of a single-wide mobile home, and must be included in total occupancy costs. The features this amount would buy in 1974 are described in Figure 10. Tie-down requirements vary according to wind conditions and the

\$/Space	PARK SIZE, # SPACES PER PARK				
	50	100	150	200	500
\$100	\$ 5,000	\$10,000	\$15,000	\$20,000	\$ 50,000
200	10,000	20,000	30,000	40,000	100,000
300	15,000	30,000	45,000	60,000	150,000
400	20,000	40,000	60,000	80,000	200,000
500	25,000	50,000	75,000	100,000	250,000

FIGURE 9: FUNDS AVAILABLE FOR COMMUNITY FACILITIES
(EXCLUDING LAND COSTS)

ITEM	1974 \$ PER UNIT
Tie-Down Straps (8 frame, 2 roof straps)	\$ 75
Skirts (170 linear feet, 24" high)	250
Patio Cover (10 x 20 foot, standard prefab metal)	200
Deck/Stair (8 x 8 foot metal frame, wood floor, rails)	300
Steps (prefab metal with railings)	150
Storage Shed (prefab metal 50 square feet)	175
Carport (prefab metal, one car)	350
	TOTAL \$1500

FIGURE 10: MOBILE HOME ACCESSORIES

size of the unit. Skirts for a double-wide mobile home are about 20 percent more expensive than for a single-wide. The height of the unit above the ground also affects costs. Custom-size patio covers cost more per square foot than the standard size. Deck costs vary considerably according to size and material; many decks are low enough to omit railings. Custom-built steps, storage sheds, and carports would cost more than prefabricated metal designs.

A number of items in this list would not be required at all if the design of the unit in relationship to the site were changed. For example, if the unit is placed eight inches above the ground, no entry steps, skirts, and decks are required. The savings of \$700 per unit from deleting these items could easily be more than any added costs of sitework to reduce the height of the unit above the ground. Design changes will inevitably occur as manufacturers realize that the unit and its site must be designed as an entity, and the least expensive unit design may not be the least expensive unit/site design.

The number of variables affecting the construction cost of a mobile home park explains the wide range of costs reported to PMHI. Costs are affected in varying degree by the following factors:

- Scope
- Location
- Park Size
- Site Conditions
- Density
- Design Efficiency
- Quality of Materials
- Community Facilities

Low cost does not necessarily imply low quality - it may result from more efficient design. Regardless of the generalizations that can be made about costs, there will always be exceptions.

One developer decided that mobile homes do not appeal only to the cost conscious retirees and young married families of America. His new park will rent for \$265 to \$350 per space, and the total price tag of \$15-million for 220 mobile homes works out to \$68,000 per space. The park includes a \$500,000 clubhouse, golf course, two Rolls Royce automobiles, and at least one \$150,000 mobile home.⁶ It took a bold entrepreneur to conclude that there would be a market for such a park, or to convince anyone else. The owner/developer took several months to sell the concept, despite a track record that included control of 85 parks with 27,000 spaces (more than anyone else in the country).

This example underscores the most important conclusion of PMHI's construction cost analysis: to accurately estimate costs, one must accurately describe the end product.

1.5 TOTAL DEVELOPMENT COSTS

The total development cost of a mobile home park is the sum of its four major components: land, zoning and fees, design, and construction. From the preceding analysis, it is apparent that these costs vary considerably (Figure 11). In a rural area where land and zoning costs are low, design is accomplished by the owner, and the park provides only minimum features, total initial costs can be as low as \$3,000 per space. A quality park in a prime suburban or resort location could cost five times as much. The typical suburban park with land at \$5,000 per acre, average zoning and connection fees, a professional design, and limited amenities will cost about \$5,000 per space to develop. Costs of interim construction financing are reflected in the construction figures shown. These initial development costs can be used as a basis for projecting lot sales prices or rental charges, the user cost of a mobile home park.

ITEM	LOW	TYPICAL	HIGH
Land @ 6 units/acre	\$ 50/Space	\$ 800/Space	\$6,000/Space
Zoning and Fees	0 "	500 "	2,500 "
Design	50 "	200 "	500 "
Construction	2,900 "	3,500 "	6,000 "
TOTAL COSTS	\$3,000/Space	\$5,000/Space	\$15,000/Space

FIGURE 11: TOTAL DEVELOPMENT COSTS, June 1973

1.6 RENTAL CHARGES AND SALES PRICES

The cost of a park to its occupants is the sales price or rental charge. To derive the probable sales price for a lot, it is necessary to add an allowance for marketing costs and profit to the developer's costs. The rental charge in a rental park also reflects the costs of operating expenses, permanent financing, the owner's profit, and utilities included in the rent. These aspects of park costs are discussed extensively in remaining sections.

The range of probable sales prices for various development costs, including order-of-magnitude allowances for marketing costs and profit, are shown in Figure 12.

Rental charges for new parks reported by MHMA were in the \$50-\$60 range in 1974.⁷ These figures appear low, since 1973 median rentals for all rated parks reported by Woodall's were \$40-\$49. One new "quality" park in high cost Washington D.C. had lots renting for \$85-\$90.⁸ Many new California parks had rentals exceeding \$100 per month. On the other hand, the rent for a furnished, air conditioned 12 x 65-foot mobile home in a new 180 space park in Alabama was \$160 per month plus electricity. The home was valued at about \$6,000 - the park included a laundry and pool, but no landscaping. The electric bill brought the total monthly cost to less than

ITEM	LOW	TYPICAL	HIGH
Total Development Cost (Excluding Land Cost)	\$3,000/Space	\$5,000/Space	\$15,000/Space
Marketing/Profit Factor	500 "	1,000 "	2,000 "
LOT SALES PRICE	\$3,500/Space	\$6,000/Space	\$17,000/Space

FIGURE 12: LOT SALES PRICES
JUNE 1973

\$200. The equivalent costs for more elaborate homes in parks with more amenities are closer to \$300 per month while the home is being amortized (typically 7 to 12 years).

In most cities, \$200 to \$300 per month is comparable to the cost of renting apartments or older housing, especially when the cost of furnishings is included. This indicates the extent to which the families paying these costs choose mobile home living because they prefer it, rather than from economic necessity. From a cost point of view, the relatively low initial cost of the mobile home unit (about half the square-foot cost of a conventional home) and the availability of long-term financing for appliances and furnishings are major advantages. Perhaps more important, after the home loan is paid the park cost and taxes become the total cost. In conventional housing, this generally does not occur for at least 20 years.

2.

Operating Costs

Figure 13 shows a breakdown of operating revenues and expenses as a percentage of total revenues per park. The figures are based on an analysis of several conventionally financed mobile home parks.

For the most part, the categories of income and expense are self-explanatory. For example, "Rentals" includes income based on monthly space rentals, fees for use of recreation facilities and additional charges for guests, pets, or a third adult. "Advertising and Promotion" expenses vary according to the age of the mobile home park as well as the vacancy rate. It is obvious that a new park will incur heavier advertising costs than a well-established park with a low vacancy factor. "Land and Building Taxes" vary widely according to local and state tax rates.

Figure 13 compares favorably with information found in FHA and other literature studied by PMHI, in that gross expenses including utilities but not depreciation or interest are about 40 percent of total revenue.⁹

Obviously, the key to park profitability is the rent level, since this is the major source of revenue. Only by charging the appropriate rent can a park compete with those nearby and still turn a profit. It is in determining the initial rent level that the expense rule of thumb shown in Figure 13 becomes useful to the developer.

In order to maintain full occupancy the rent must be compatible with that for nearby parks offering the same amenities. On the other hand, rent must

	<u>R A N G E*</u>		
	Low %	Average %	High %
Income			
Rentals	23.0	25.0	29.0
Utilities	10.0	13.5	16.0
Washing and Vending Machines	1.0	2.5	5.0
TOTAL INCOME		100 %	
Expenses**			
Advertising and Promotion	0.2	0.8	1.0
Dues and Permits	0.2	0.4	1.0
Insurance	0.5	1.0	1.6
Legal and Accounting	0.3	0.4	0.7
Office Expenses	0.1	0.4	0.6
Repairs/Maintenance	2.0	3.8	4.4
Salaries and Wages	5.4	8.6	12.2
Services Purchased	0.1	0.3	1.0
Supplies	0.7	1.2	2.0
Taxes-Land and Building	6.0	8.2	12.0
Telephone	0.4	0.5	1.0
Utilities-Gas, Water Electric	11.0	13.2	16.1
Miscellaneous	0.5	1.0	2.0
TOTAL EXPENSE		39.8 %	
Depreciation	10.0	14.6	20.0
Interest on Loan Payments	10.0	15.0	20.0

*Based on Several current projects

**Items of expense are expressed as a percentage of Total Income.

FIGURE 13: OPERATING REVENUES AND EXPENSES

be adequate to cover direct expenses, interest, and taxes while providing a reasonable return to the developer. Finally, rental receipts must be sufficient to cover cash demands of running the park and paying back principal.

It is the careful balance of these factors that determines the profitability of the park, and most lenders will require the developer to provide a pro forma balance sheet, income statement, and cash flow statement before considering the project to be a feasible investment opportunity.

There are many ways to calculate pro forma statements. One is to base calculations on prevailing rents in the geographic area of the proposed park, and generate income and revenue from that starting point. Although this approach does provide a beginning set of calculations, it suffers from lack of attention to current financing conditions. That is, with a trend toward increasing interest rates, mortgage payments generally are higher for new parks than for older parks. Therefore, the initial calculations based on prevailing rent levels will have to be revised upwards in order to compensate for higher mortgage payments.

Another way to begin pro forma calculations is to assume a probable financing arrangement considering the current financing climate and the developer's relationship with the lender. From this point of departure, and the 40 percent expense approximation, it is possible to calculate rent levels. These must then be compared to existing parks in the area, taking into account amenities provided as well as projected consumer demand.

To illustrate the types of calculations that might be made in preparing pro forma income and cash flow statements, the first approach discussed above is used. This probably is the most common method since it enables a potential lender to see calculations of projected income based on competitive rentals before he is committed to particular terms for the loan. The terms that he then prescribes will affect the feasibility of the project at the assumed rents.

Consider, for example, two 150-space mobile home rental parks denoted in Figure 14 as Park A and Park B. Park A is a moderate quality park with no common facilities for the tenants, whereas Park B is a more luxurious park with complete facilities. The simple calculations of Figure 14 incorporate the following assumptions:

- a) The park is 100 percent rented. In reality it may take two years or more to obtain 100 percent occupancy.
- b) All income is generated by space rental. Utilities are paid for by the tenant. Note that in Figure 13 utilities account for about 13 percent of income. This reduces the gross expenses to 27 percent of gross income. In actual pro forma statements expenses would have to be broken down in detail if a lender is to be convinced that the developer has carefully thought out his project. The 40 percent rule (or 27 percent rule if utilities are excluded) is only useful for initial calculations.

Cost/Price Analysis

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<u>Park A</u>	<u>Per Space Parameters</u>	<u>Park B</u>
\$ 800	LAND	\$1,000
500	ZONING/FEES	800
200	DESIGN	200
3,500	CONSTRUCTION	6,000
200	WORKING CAPITAL	200
<u>\$5,200</u>	TOTAL PER SPACE COST	<u>\$8,200</u>
\$780,000	TOTAL COST (150 Spaces)	\$1,230,000
\$60	PREVAILING MONTHLY AREA RENT	\$80
\$108,000	TOTAL YEARLY RENTAL INCOME	\$144,000
	<u>Pro Forma Income Statement Be-</u> <u>fore Debt Burden and Depreciation</u>	
\$108,000	GROSS INCOME (less utilities)	\$144,000
29,160	GROSS EXPENSES (27% of gross income)	38,880
<u>\$ 78,840</u>	NET INCOME BEFORE DEBT SERVICE AND DEPRECIATION	<u>\$105,120</u>

FIGURE 14: PARAMETERS FOR TWO PROPOSED PARKS

c) Straight-line depreciation over the mortgage period is used in the calculations. Generally, developers will use accelerated depreciation where possible in order to obtain maximum tax shelter benefits in the early years of the operation.

From Figure 14 it is possible to calculate the return on investment, given financing terms prescribed by the lender. Assume, for example, that the lender is willing to finance 80 percent of the project at an interest rate of 8.5 percent for a period of 25 years. To simplify calculations a cash based accounting system is assumed, so that all rental revenue and expenses occur during the fiscal year. Figure 15 shows the results of calculations for the pro forma income and cash flow statements.

Figure 15 indicates that, although the park operation would be profitable under the stated financing terms, the return may not be large enough to justify developer's risk. Also, cash flow may not be great enough to cover startup costs. Of course, accelerated depreciation could significantly reduce income tax payments during the early years without affecting cash receipts, and more funds would be available for large initial operating costs.

As a next iteration, it is possible to determine what monthly rent increase per park space is needed to establish a desirable cash flow. By assuming a new rent structure, revised pro forma income and cash flow statements can be calculated.

<u>Park A</u>	<u>General Calculations</u>	<u>Park B</u>
\$780,000	TOTAL COST	\$1,230,000
156,000	EQUITY (20%)	246,000
624,000	AMOUNT OF LOAN	984,000
	YEARLY PRINCIPAL & INTEREST	
	PAYMENT (8.5%, 25 yrs.	
60,653	constant 9.72%)	96,645
525,000	TOTAL CONSTRUCTION COST	900,000
	DEPRECIATION (Construction	
21,000	Cost Over 25 years)	36,000
35,693	AVERAGE YEARLY INTEREST PAYMENT	57,285
	<u>Pro Forma Interest Statement</u>	
\$108,000	INCOME	\$144,000
(29,160)	EXPENSES	(38,880)
(35,693)	INTEREST	(57,285)
(21,000)	DEPRECIATION	(36,000)
<u>22,147</u>	NET INCOME BEFORE TAXES	<u>11,835</u>
14.20%	RETURN ON EQUITY	4.81%
	<u>Pro Forma Cash Flow Statement</u>	
\$108,000	RECEIPTS (Income)	\$144,000
(29,160)	EXPENDITURES (Expenses)	(38,880)
(60,653)	PRINCIPAL AND INTEREST PAYMENT	(96,645)
<u>11,074</u>	TAXES (50% of Profit)	<u>5,918</u>
7,113	NET CASH IN	<u>2,557</u>
\$47.42	NET CASH IN PER SPACE PER MONTH	\$17.05

FIGURE 15:

PRO FORMA INCOME AND CASH FLOW STATEMENTS

Repetition of this procedure should give income and cash flow statements that will show satisfactory return to the investor and adequate cash flow. These final rents should be evaluated in light of rent levels in neighboring parks and the market study.

The simple calculations in this chapter must be refined in order to convince a lender that a particular project is feasible. However, they do provide the developer with some idea as to the suitability of the proposed financing terms. The principles of all such calculations are the same regardless of their complexity. That is, rent levels must cover cash requirements, provide the investor an appropriate return or tax shelter, and be consistent with the developer's marketing strategy.

C.

POTENTIALS

1.

Potentials for Reducing Development Costs

Development costs for mobile home parks do not offer the same potential for cost reduction as do other industry costs. The most significant costs that can be reduced are land costs and those aspects of construction costs that relate to park size, such as the costs of community facilities.

Land costs could be reduced if parks were built in more rural areas where land costs are lower, but energy considerations do not favor such a trend. If park densities are increased, land costs per space can be significantly reduced even where land costs are high. This should encourage manufacturers to develop totally different unit designs suitable for higher density locations without sacrificing overall environmental quality.

Construction costs are affected by park size even if quality and scope are held constant. This partly explains why park sizes have increased steadily in recent years. Land costs tend to be lower if large parcels are purchased, and front end costs such as design and zoning fees cost less per space as park size increases. Per space construction costs are lower for larger parks since costs of common facilities, such as community facilities and recreation space, are shared by more users, and bid costs for large parks tend to be lower for any given quality level.

Apart from density and park size, however, possibilities for reducing development costs are limited. Standardizing design details and

specifications and simplifying bid packages would yield some savings, as would careful control of designs to ensure maximum efficiency. Another possibility would be to build several parks at once, to the same standard, and advertise them at the same time, offering some volume economies. But potential savings such as these are not as viable as potential savings from higher densities and larger parks.

As land prices continue to escalate, mobile home manufacturers and park developers will be encouraged to produce higher-density housing. With cluster design, even single-family homes are feasible at densities up to ten units per acre without creating insurmountable environmental problems. Planned unit developments in conventional housing have demonstrated successful cluster single units at six to eight units per acre and mobile homes are still much smaller (about 900 square feet in 1974) than conventional singles (about 1500 square feet).

However, cluster designs cannot be accomplished successfully simply by siting existing mobiles closer together. Complete redesign of units to be compatible with higher-density site conditions would be required, as would a thorough rethinking of site planning principles.

Industry trends point toward higher land prices in locations near employment centers and added pressure to develop higher density forms of mobile housing in increasingly larger projects. If these trends are not anticipated, industry growth will be severely restrained.

2.

Potentials for Reducing Operating Costs

Recently, inflation has resulted in large cost increases for park construction and all aspects of park management. If rents for mobile home spaces are to remain low, park management must seek ways to reduce these costs. One way is to build parks with more rental spaces. Not only are construction costs reduced on a per-space basis, but some fixed operating costs are substantially lower for larger parks.

For example, wages for park personnel, costs of operating community buildings, advertising, insurance, legal and accounting costs, and office expenses will decrease per space as the number of spaces increases. Obviously, there is a point where more personnel and facilities must be added to provide services for a larger number of tenants. However, an economic analysis before the park is constructed should indicate an optimum operating size.

Another way to reduce costs is to use more sophisticated park financing methods in order to improve financing terms. If the interest rate can be reduced, yearly interest expense will be lower on a per-space basis. If the loan term can be extended, both annual interest and principal payments will be reduced on a per-space basis.

D.

SUMMARY

Development Costs

How much does a mobile home park cost? The answer differs each time the question is asked. Construction costs for 1973 reported to PMHI ranged from \$700 to almost \$10,000 per space. The Mobile Home Manufacturers Association cited 1973 costs of \$2,200 to \$3,000 per space, excluding land.¹⁰ In 1966, Practical Builder magazine reported costs of \$500 to \$3,000 per space.¹¹ One park in Palm Springs, California cost \$68,000 per space.¹² Land and other development costs vary even more.

Research undertaken by PMHI indicates that a 150-space park with typical amenities would cost slightly less than \$3,500 per space to build in Washington D.C. in June 1973. The typical park would provide streets, parking and driveways, minimum utilities, lawns, mobile home pads or runners, and tie-down anchors. However, a 150-space park with features comparable to a moderate-cost subdivision would cost \$5,500 per space in 1973. The "quality" park would also provide curbs and gutters, walks, natural gas system or buried oil tanks, street lights, underground storm drains, trees and shrubs, patios with privacy fencing, and slabs for storage sheds. For many conventional homeowners, nothing less would be acceptable.

Community facilities having a value of \$75,000 would add \$500 per space to the cost of the "typical" and "quality" parks. Costs for later years or other locations can be derived by applying factors from residential cost indices

The cost of a mobile home park, to the purchaser of a lot in a mobile home subdivision, is its lotsales price. PMHI did not survey mobile home lot owners, but probable sales prices can be derived from available cost figures for land, zoning and fees, design, and construction. If an allowance is added for construction financing, marketing costs, and profit to these figures, the "typical" park that costs \$3,500 per space to build will have lots selling for about \$6,000. The range of sales prices is from about \$3,500 to \$17,000 per space.

This wide variation in costs makes generalization difficult. Moreover, few industry sources are willing to reveal reliable cost information. PMHI's sample of 74 projects for which cost data was available varied in location, size, and quality. Site visits to these projects to evaluate quality differences were not feasible, although drawings were available for 30 projects. The sample was large enough to yield a number of conclusions and to explain why costs vary so much:

Land costs vary tremendously, from about \$300 to \$35,000 per acre. Land for a typical suburban park will cost \$5,000 per acre, or \$800 per space at six units per acre.

Zoning costs and fees must be estimated for specific locations. Costs range from almost nothing in rural areas to perhaps \$2,500 per space if re-zoning is difficult and utility tap fees are high.

Professional design services for a park of 150 spaces will average \$200 per space. The cost of these services would be higher for small parks.

Construction costs ranged from \$700 to \$68,000 per space in 1973. A "typical" 150-space park in Washinton, D.C. costs \$3500 per space, a "quality" park costs \$5500 per space, excluding community facilities.

Construction costs (excluding land cost) are affected by site conditions, design efficiency, quality of materials, park size, amenities, and location.

The size of each park is significant. A 25-space park could cost twice as much per space as a 200-space park of comparable quality.

Density has no significant impact on park construction costs. It primarily affects the per unit cost of land.

The number and type of items included in a project affects construction costs more than other factors. It is impossible to estimate a park's cost until its amenities have been specified.

Costs for "outdoor" accessories add about \$1500 to the cost of a single-wide mobile home, and must be included in total first costs. This amount covers tie-down straps, skirts, a storage shed, a patio cover, a small deck, carport, and entry steps.

These conclusions, taken together, reveal a very important point:

The cost of a developed site for a mobile home approaches, and may exceed, the cost of the mobile home itself.

This is rarely true in conventional housing and is a major restraint to industry growth. As land and site development costs increase further,

the mobile home industry will face additional pressure to produce higher-density housing.

Operating Costs

The largest single contributor to park operating costs is loan amortization. Interest and principal payments can account for one-third of total park cash income. In addition, real estate taxes, wages for park personnel, and utilities are large cash drains.

If a park is fully rented, it should return a pre-tax profit between 20 and 40 percent. However, profit is highly dependent upon the number of vacant park spaces. Only one major expense item, utilities, decreases in direct proportion to rented spaces. Wages, loan amortization, and real estate taxes are fixed amounts which must be paid regardless of occupancy. Therefore, as in any rental real estate development, the key to profitability is to ensure full occupancy by proper market assessment before the initial investment is made and effective marketing after construction is completed.

E.

FOOTNOTES

FOOTNOTES

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3. "When the Zoning Gets Tough...The Tough Get Zoning," Mobile Home Merchandiser magazine, Vance Publishing Corp., April, 1974.
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F.

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MOBILE HOME PARK FINANCING

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A.

INTRODUCTION

From a developer's standpoint, real estate investments generally have one or more of the following financial goals: capital gain, rapid recovery of equity, cash flow, leverage, and tax shelter. Mobile home parks can offer the investor all of these financial incentives. Further, the structure of mobile home park financing, shown in Figure 1, is similar to that for other real estate investments. It will be shown in succeeding pages that mobile home parks have some advantages over conventional real estate, especially if an investor intends to participate in ownership of the development for a long time.

Despite financial incentives to develop mobile home parks, there is a shortage of park space in many parts of the country. In order to understand the reasons for such shortages, one must be aware of the politics of the localities involved, attitudes of lending agencies, policies of state and federal governments, and characteristics of the developers. This section on park financing will explore these aspects of the financing problem, emphasizing those which have impeded the growth of the mobile home park industry.

Over the years the nature of mobile home park developers has changed. In the past, small developers found a 14 to 30 percent pretax return on equity an adequate incentive to build parks with fewer than 100 spaces. Beginning about 1965, however, large land developers entered the park development business, hoping to garner large profits by building mobile home developments with 500, 1000, 2000, or more spaces.

Mobile home manufacturers have entered into park developments, seeking

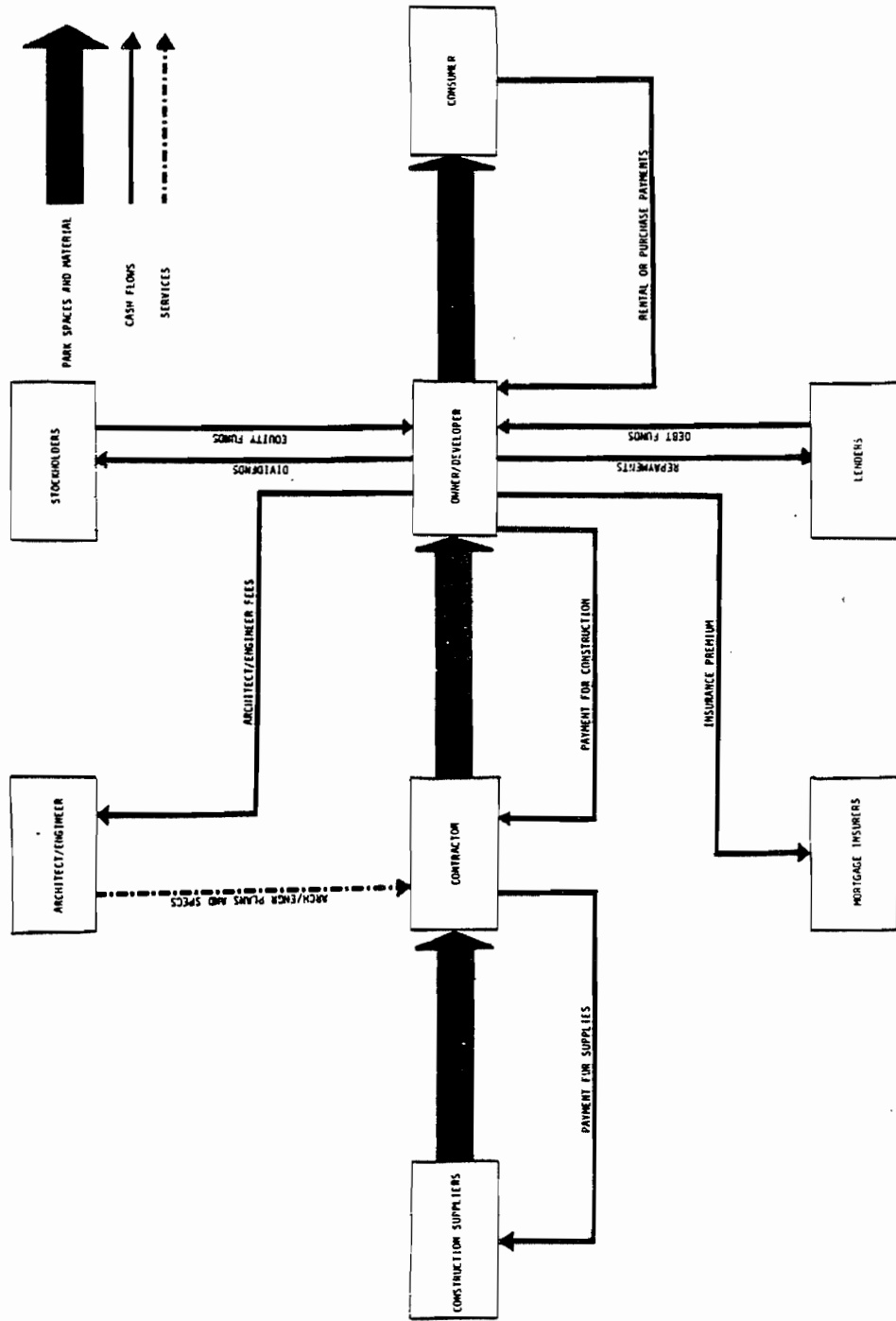


FIGURE 1: MOBILE HOME PARK FINANCING: A GENERAL OVERVIEW

an outlet for their product. Some of these parks were unsuccessful, because the manufacturer/developer had no expertise in real estate development. Manufacturers also have encountered problems when they tried to capture additional profits by selling their own units. If dealers in one geographical area find that they are losing sales to a manufacturer, they will spread this information to their dealer friends in other parts of the country. These dealers, in turn, will not order as many units from the manufacturer.

Mobile home dealers have been very active in park development. Many dealer-developed parks are small, having less than 200 spaces, but some multi-lot, multi-state dealers have developed larger parks. The availability of an attractive site makes it easier for dealers to sell mobile homes to their customers. Since dealers receive a 15 to 40 percent markup on units sold, anything that helps sell homes, such as attractive park space, is given serious consideration.

The upper end of dealer markups usually occurs when the dealer has a "closed park." That is, the consumer either buys a unit from the park owner's dealership at a cost of up to \$2000 more than what a dealer would normally charge, or does not get into the park. This situation usually exists in areas where there is a shortage of park space. In such instances a park owner/developer has been able to get land zoned for mobile homes when the surrounding area prohibits such developments, or he already has a park in a community that prohibits new parks. Owners in these situations who do not have dealerships often charge entrance fees of up to \$1500 per unit.

As the nature of developers changed, they have become more sophisticated. The time horizon of their potential investments has taken on greater importance. Many wealthy individual investors and corporations owning large tracts of unused land have been looking at mobile home parks as 10 to 15 year investments. It is possible that, due to suburban sprawl, this land could be used more profitably in another type of development at the end of this time period. On the other hand, many owners have been developing subdivision or condominium parks in which the cash flow primarily occurs during the first two years when homes are sold to consumers.

Summarizing, mobile home parks can be a profitable and flexible investment alternative. Relatively low housing costs typical of mobile home living cater to a broad market of low income people, young marrieds, and elderly. This large market allows the developer considerable latitude in design and financial specifications for a park.

This section deals with financial considerations of mobile home park investment. First, the major types of parks are described. Second, the present financial situation is analyzed. Third, the performance of current mobile home park financing is evaluated. Fourth, apparent trends are discussed. Finally, potential financing methods that may improve industry performance are mentioned.

Throughout this section on park finance the reader will detect an underlying confidence that, as land and construction costs continue to

rise, mobile homes will assume an increasing percentage of the single-family housing mix. Historically, this has been substantiated by large growth rates in the mobile home industry. However, in 1974 mobile home producers and park developers encountered a downward growth trend similar to that affecting the rest of the economy. Nonetheless, in this discourse we have emphasized recent history before the general economic downtrend of 1974, because projections made in early 1976 indicate that it probably is more representative of long term prospects for the mobile home industry.

B.

ANALYSIS OF THE
PRESENT SITUATION

1.

Financial Configurations
for Mobile Home Parks

1.1 RENTAL PARKS

It is commonly held that a majority of the nation's population prefers to own a home. However, mobile home parks have been predominantly rental parks, where the consumer owns a mobile home and rents the land on which it is placed. By looking into the financial implications of rental, subdivision, cooperative, and condominium parks, this apparent contradiction may be explained.

The developer of a rental park traditionally has been able to secure large profits by offering a unique style of living at a monthly occupancy cost lower than anything available in the conventional housing market. However, a comparison of rental parks with other types of mobile home developments, noting that the only advantage of rental parks is ease of consumer mobility, leads one to wonder why more than 90 percent of all mobile home parks are rental developments.

Some incentives for a rental park developer are the benefits of income tax deduction, depreciation charges, and potential capital gains from land appreciation. Also, lenders support rental parks because they realize a high 12 to 14 percent return from the add-on consumer loans to purchasers of mobile homes. It must be remembered that both the lender and developer are exposed to greater risks in rental parks than in other

types of mobile home developments, These risks recently have become evident in areas where parks were built without the support of adequate market studies. For example, some new rental parks in California, Arizona, Michigan, and Florida experienced vacancy rates of over 60 percent from 1970 to 1972.

1.2 SUBDIVISION

In a subdivision the homeowner normally purchases a packaged lot and mobile home from the developer. The mobile home subdivision, however, should not be confused with cooperative or condominium parks, which usually have common recreational facilities. The absence of such facilities has been one limitation on the development of subdivisions.

Although Figure 2 indicates that subdivisions are expected to have the lowest associated risk to the lender, this does not appear to be the case in practice. Both developers and lenders, fearing low consumer acceptance and resulting high vacancy levels, have been reluctant to participate in this type of venture. Lenders also fear that subdivisions, lacking the strict regulations and sound management of conventional parks, will deteriorate into trailer slums and result in heavy losses for the lending institution.

From the consumer's standpoint, a subdivision represents the lowest available cost of home ownership. Since the mobile home is attached to the land, a borrower is able to obtain a mortgage having a relatively low interest rate and long term. As a result, monthly mortgage amortization and interest payments are much lower than for add-on financing, the method traditionally used in mobile home transactions.

	<u>Rental</u>	<u>Subdivision</u>	<u>Cooperative</u>	<u>Condominium</u>
<u>Federal Tax Deductions for Property Tax and Interest on Land</u>	No	Yes	Yes	Yes
<u>Consumer Owns Land</u>	No	Yes	Yes	Yes
<u>Elimination of Arbitrary Rent Increases</u>	No	Yes	Yes	Yes
<u>Potential Capital Gain from Land Appreciation</u>	No	Yes	Yes	Yes
<u>Common Facilities</u>	Yes	No	Yes	Yes
<u>Elimination of Monthly Park Management Payment</u>	No	Yes	No	No
<u>Conventional Mortgage</u>	No	Yes	No	Yes
Lender's Risk				
1 - Highest				
4 - Lowest	1	4	2	3
Developer's Cost of Money				
1 - Highest				
4 - Lowest	1	.4	2	3
Ease of Mobility				
1 - Highest				
4 - Lowest	1	2*	4	2*

* These rank equally in ease of mobility.

FIGURE 2 FINANCIAL IMPLICATIONS FOR CONSUMER OF TYPES OF MOBILE HOME PARKS

Furthermore, since the consumer has decided to forgo recreational facilities, he need not pay any park rental or management fees. His only payments are local property taxes or fees, which are much lower. In addition, under Section 216 of the Internal Revenue Code, homeowners are able to deduct real property taxes and the interest paid on the mortgage from their personal income tax. However, this may not be a benefit for low income people living in subdivisions, because their standard deduction usually exceeds the total of the itemized amount.

1.3 COOPERATIVE

In a mobile home cooperative each household owns shares in a corporation proportional to the value of its land. Householders receive a proprietary lease, which sets rules and regulations pertaining to commonly used facilities and may set limitations on the model, quality, and age of mobile homes in the park.

Under the lease agreement a homeowner must make monthly payments to the cooperative to cover the cost of community facilities, maintenance, and the cooperative's debt obligation. These payments can become a burden if vacancies should arise, because shares revert to the cooperative when people leave the park. Under these circumstances existing stockholders own a greater percentage of the project, and pay a greater percentage of the park's obligations.

By joining a cooperative, a household indicates its intention of maintaining the mobile home as a long-term residence. The household, however, is unable to translate the permanence of their home ownership into more equitable mortgage terms for the following reasons:

- (1) The cooperative holds title to the land and the individual shareholder cannot use this title as collateral for a loan

or mortgage.

- (2) Shares of the cooperative and the proprietary lease generally are not considered real property; most lenders will not accept them as collateral for a mobile home loan. If after building equity for a number of years the household decides to sell its share of cooperative, it may have difficulty finding a purchaser able to pay both the equity in the cooperative and down payment on the mobile home.

Thus, the adverse consequences of a cooperative arrangement are: additional liability, possible restricted resale market, traditional high interest rate mobile home financing, and two substantial down payments - one for equity in the cooperative and the other for the mobile home.

On the other hand, there are financial benefits to cooperative ownership. Owners can deduct their share of the cooperative's interest payments and taxes from personal income tax. Because interest payments on mobile home loans can also be used as federal income tax deductions, low income households in rental and cooperative parks may find that itemized deductions exceed the standard deduction. The cooperative arrangement also eliminates the possibility of arbitrary rent increase. As a result, monthly payments are utilized for the benefit of the residents rather than a park owner. In addition, there is the potential of capital gains from land appreciation upon the sale of a household's cooperative shares.

1.4 CONDOMINIUM

In some respects condominiums are similar to cooperatives. Tax benefits, potential land appreciation, protection against arbitrary rent increase, and elimination of a park owner's profit are common to both arrangements. The fundamental difference between the two is that a condominium household takes title to the land, and is able to use this title as collateral for a conventional mortgage covering the cost of both the mobile home and land. It is relatively easy to resell a condominium, because the new purchaser will be able to obtain a mortgage without making a large down payment.

The liability of the condominium owner is not as extensive as that of the cooperative shareholder. If vacancies in a park should rise and existing owners fail to meet their monthly condominium payments, the condominium owner would lose only the rights to those facilities that are shared in common with other residents.

Since the developer of a condominium park sells the land and pays off a large part of his loan over a short period of time, he should find it easier to secure financing than the developer of a rental or cooperative park. This, however, has not been the case. Experienced lenders who

finance parks also try to finance the mobile homes; they are reluctant to relinquish the high interest rates typical of traditional mobile home financing. Lenders cannot legitimize these rates in a condominium park, and must provide a conventional mortgage loan. To avoid this, the lender will encourage the developer to build a rental park. In the future, as more lenders engage in mobile home financing and traditional rates decline, the incentive to encourage rental parks will diminish.

As a result of advantageous financing terms to both purchasers and developers, monthly occupancy costs to the consumer at a condominium park are lower than at a rental or cooperative park. Only a subdivision has lower cost than a condominium, but the owner in a subdivision does not receive the same amenities, including recreational facilities and social interaction, that characterize mobile home park living.

2.

Sources of Development Capital

2.1 CONVENTIONAL FINANCING

Parks are being developed and financed through conventional financial institutions without FHA or other insurance. The loans are based entirely on the security of the mobile home park itself, but have additional guarantees such as the personal endorsement of developers who have considerable net worth, guarantees by corporations who are interested in the industry, or a pledge of marketable securities. Parks that are financed with only the park itself as security depend on the value of the improvements, land, and income to establish valuation upon which to place loan limits.

Mortgage officials generally view mobile home parks as single purpose properties that require careful consideration before funds can be committed. Certain fundamental practices are followed, and they relate to all project loans whether they are mobile home parks or other types of specialty loans. In presenting lenders with applications for park loans, the developer should make a careful study of the factors that lenders consider when making a financial decision. These include:

Location. A market study of the area should be undertaken to determine whether the site is suitable for a mobile home park. From where will park inhabitants come? What percentage of the population is young,

married, elderly? How close is the property to schools, transportation, shopping? Is the land in the path of metropolitan expansion? Other questions are listed in the land buying checklist, Appendix 2.

Competition. How many park spaces are within five miles of the site? Fifty miles? One hundred miles? What are the vacancy rates in these areas? What is the municipality's attitude toward zoning for mobile home parks? Is the zoning board about to allow others to build parks? How will you compete with other park owners? Will you have a closed or open park?

Consumer Acceptance. What is the trend in attitudes toward mobile homes in this area? What types of homes sell in the area, single-wides or double-wides? Are these homes low, medium, or high priced? If the developer demonstrates knowledge of his market, the lender will be more confident that the park concept is viable.

Property Improvements: Quality and Cost. Care should be taken to use improvements that meet the requirements of the lender, locality, and consumer. Utility pads should be top quality. It is necessary to decide whether there is going to be a swimming pool, tennis courts, or clubhouse. All improvements must have accurate cost estimates which take future price increases into account.

Cash Flow Projections. Careful analysis of future profits and cash flow is essential in procuring a loan. The lender must feel that the developer has a complete understanding of the project's financial potential.

Monthly pro forma cash flow and income statements for the park's first two years will show the lender that the situation has been analyzed in detail. The pro forma cash flow should be based on the sources and uses of funds.

Risks. Any project has some degree of risk. The mobile home park developer should know what the risk factors are and how they will affect the project. The lender will delve into the developer's views on the stability of income, quality of management, present and future value of the land, as well as factors discussed earlier. If a developer can present the lender with an honest appraisal of risks involved, then the chances of obtaining a loan will be improved. The terms and interest rate that are finally negotiated will be directly related to the lender's confidence in the abilities of the developer and feasibility of the project.

2.1.1 Commercial Banks

Commercial banks with experience in mobile home financing have found park financing to be especially profitable when they are able to tie high-yield consumer loans to the park mortgage. Of course, this can be done only when the developer is also a dealer, and a survey conducted in conjunction with this study indicates that only one-third are mobile home dealers. In such tie-in arrangements the dealer normally has the option of taking his consumer contracts elsewhere if the bank is not providing competitive rates and terms. Upon

exercise of this option the owner/dealer relinquishes his park loan with its ten to 20 year maturity, and enters into a new agreement with another lender.

The attractiveness of tie-in arrangements is one reason why commercial banks have been reluctant to finance Federal Housing Administration (FHA) insured parks. FHA guidelines prohibit park owners from selling mobile homes on the premises.

An example of financing arrangements for a typical mobile home park is shown in Figure 3. Notice that the owner must make a 20 percent down payment and the term is 15 years.

2.1.2 Savings and Loan Associations

Federally chartered savings and loan associations (S and L's) are very active in providing construction and working capital financing to park developers. Many savings and loan officials view park development as a natural extension of their prime function, supplying mortgage credit.

Since passage of the 1968 Housing Act, which allows federally chartered savings and loan associations to engage in wholesale and retail financing of mobile homes, S & L's have increased their level of park financing. Like other lending institutions, S & L's usually require park owners to steer high-yield consumer credit their way. Regulations set forth by the Federal Home Loan Bank Board allow S & L's to lend up

Total Cost of 100 Space Park

Construction:	100 spaces @ \$2,750 per space	\$275,000
Land:	\$6,000 per acre, 6 spaces per acre	<u>100,000</u>
		375,000
Equity: 20%		\$ 75,000
Amount to be financed at 8%		
for 15 years (11.47% annual constant)		\$300,000
Total Interest Expense		<u>216,060</u>
Total Cost		<u>591,060</u>

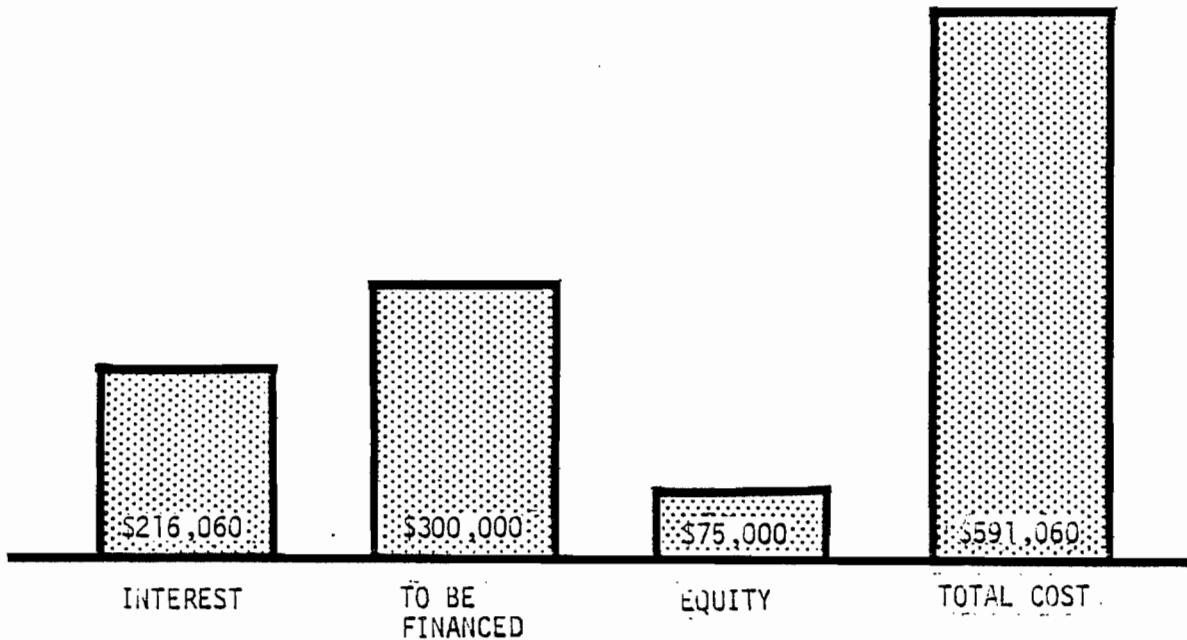


FIGURE 3: EXAMPLE OF FINANCING FOR TYPICAL MOBILE HOME PARK

to 80 percent of the park's appraised value for a term of 18 months, and thereafter the ratio drops to 70 percent for a term not exceeding 20 years.

Park developments are classified as improved real estate, and are considered part of the S & L's commercial loan portfolio. Although S & L's are allowed to invest as much as 20 percent of their assets in commercial loans, most S & L's lack the expertise necessary to evaluate such loans and, therefore, limit them to less than ten percent of their portfolio.

Under the FHA mortgage insurance program, any approved savings and loan association is permitted to originate FHA-insured loans and purchase existing FHA-insured mortgages from other lending institutions.

2.1.3 Life Insurance Companies

In 1969 one large insurance company entered into mobile home park development through a joint venture with an established firm specializing in park development. The insurance company provided approximately \$20-million for the development and operation of mobile home parks and the sale of mobile homes throughout the western part of the country. The parks ranged in size from 200 to 1000 spaces. The interesting point here is that the insurance company through its realty subsidiary also

participated in the sale of mobile homes, which results in a fast return of cash in the form of profits on sales.

Statutory limits on life insurance company investments generally are not restrictive. Laws limiting loans on real estate to no more than 20 percent of the total assets possessed by any one individual, corporation, or partnership, and on real estate mortgage loans to no more than 50 percent of total assets, do not affect most of the major life insurers.

As is typical of other real estate loans by life insurance companies, servicing and brokerage fees of one to four points often are assessed when the loan is granted. This requires the use of additional front money by the investor.

2.1.4 Pension Trust Funds

The primary pension fund sources of mortgage investment capital are state and local government pension funds and noninsured corporate pensions. State and local government pension funds invest approximately 15 percent of their assets in real estate, and noninsured corporate pension plans invest nearly five percent. Pension fund managers have limited their mortgage investing for three major reasons:

- (1) Most fund managers are stock and bond oriented.
- (2) Most fund managers lack the expertise necessary to analyze real estate investments.
- (3) The relatively small amounts of money that flow in monthly from mortgages are not really needed on this short time scale and are costly to reinvest.

As a result most pension funds have confined the bulk of their real estate financing to FHA and VA backed mortgages.

In recent years government pressure and threats to reduce tax benefits of pension funds have forced fund managers to look at their portfolios more closely. With the advent of Government National Mortgage Association (GNMA) securities and real estate investment trusts (REIT), pension funds have found new channels for their capital. Since GNMA securities only indirectly provide capital to homeowners, they do the park developer little good. REIT's can provide a vehicle for pension fund participation in mobile home park financing, although many have fallen on hard times during the past few years.

Due to the financial community's general lack of experience with mobile home parks, problems that face fund managers in evaluating conventional real estate investments are accentuated by potential mobile home park loans. As a result, pension funds have been active only in purchasing FHA-insured

mortgage loans on mobile home parks. They have not shown any widespread interest in providing conventional mortgages for parks. In cases where they have provided the initial capital, they usually demanded either part ownership or participation in the net profit before taxes.

Thus, although pension fund managers control large sums of money and could be a prime source of mobile home park financing, they usually lack the expertise necessary to evaluate such a specialized loan. Furthermore, since a majority of the managers are stock and bond oriented, it is not likely that the vast pension fund reservoir will be tapped for park financing in the near future.

2.1.5 Real Estate Investment Trusts

Real estate investment trusts (REIT's) currently play only a minor role in financing mobile home parks. Commencing in 1970, however, there has been a trend of greater REIT participation. This is a direct result of the growth of real estate trusts, whose assets increased dramatically from one billion dollars in 1968 to over \$16 billion in the second quarter of 1973. In mid-1971, when the amount of money available to REIT's for investment exceeded available conventional investment opportunities, many REIT's began investing in mobile home parks. During this period REIT's made single loans exceeding \$3.5 million to park developers.

During the past few years REIT's have been adversely affected by poor economic conditions in the construction industry. The portfolios of many REIT's

contained large loans that produced no income due to defaults by developers, and some became severely overextended. Due to these difficulties, REIT's are unlikely to be a major source of park development capital in the near future.

In periods of monetary restraint, the lightly-regulated REIT's have a competitive advantage over other real estate lending institutions for the following reasons:

- (1) Legal and structural restrictions prevent other lenders from increasing the rate they can pay to attract funds.
- (2) Life insurance companies usually find that their real estate lending is restricted due to heavy borrowing by policy owners in tight money periods.
- (3) Commercial banks are unable to meet consumer demand and are forced to sell some high-yielding construction loans to either their own REIT or an outside sponsored one.

Thus, as REIT's gain experience in this area, it is possible that they will not only play an important role in park financing, but that during tight money periods they could become a prime source of capital for mobile home park development.

Opportunities for REIT's to increase their level of park financing do exist. The extent of their penetration into the market, however, may

depend on their ability to present park owners with packages that provide for wholesale and retail financing of mobile homes in addition to mobile home parks. For example, Mobile Home Communities, which was the first equity real estate investment trust specializing in the ownership of mobile home parks, amended its declaration of trust in order to broaden activities and operate without the restrictions imposed upon a qualified REIT. The amendment allows MHC to sell mobile homes, accessories, and mobile home subdivision sites, and to provide all types of related services including insurance and financing for purchasers of mobile homes and mobile home subdivision sites.

As more park developers enter the lucrative field of mobile home sales, it will become increasingly important for lenders to provide developers with total financing packages. Those REIT's associated with commercial banks, finance companies, and financial conglomerates will have the advantage in this area.

2.1.6 Joint Ventures

In recent years joint ventures have been used to develop real estate projects that otherwise might not have been possible. A well-known example of this concept is the development of Columbia Maryland, which was a joint venture between the Rouse Company and Connecticut General Insurance Company. While most joint ventures are formed to develop conventional real estate projects, a limited number of mobile home parks have been financed in this way.

Typically, the participants in these ventures are a local investor or small developer who also manages the park, and either a large developer, mobile home manufacturer, or corporation. The local partner provides an understanding of the local market, which facilitates the initiation of project proposals and feasibility studies. Often, he also provides the land and develops the park. Since he generally has equity in the operation, there is a strong incentive for him to work for the project's success. The other partner usually provides financial resources, additional feasibility study expertise, accounting and financial control systems, and a wide range of services that may include planning and design, financing, and marketing expertise.

Capital entering mobile home park projects through the medium of joint venture has been limited. This marriage of skills and resources, however, may provide a significant source of future mobile home park development.

2.1.7 Manufacturers Developing Parks

For many years mobile home manufacturers have felt that manufacturing offered a higher return per dollar invested than park development. Behind this reasoning is the fact that, assuming an 80 percent mortgage, 20 percent equity invested in a park will yield at most around 20 to 25 percent before taxes. Further, debt from the park mortgage will show on the balance sheet.¹ Also, depreciation from the park will decrease earnings. These factors may adversely affect the price

of the firm's common stock.

As a result, mobile home manufacturers have refrained from development. When manufacturers have developed parks, they usually limited home sales in the park to their brand. Local dealers who had lost business to the manufacturer then notified their fellow dealers in other parts of the country. Fearful that the manufacturer would do the same in their area, the dealers would begin to favor the units of other manufacturers.

Also, manufacturers found that mobile home park development required expertise that they did not have. The result was unprofitable parks that were a financial and managerial drain on the firm. These problems caused most manufacturers to withdraw from the park development business.

2.2 GOVERNMENT PROGRAMS

2.2.1 Federal Housing Administration

The prime function of the Federal Housing Administration (FHA) is to insure mortgage loans made by commercial banks, mutual savings banks, savings and loan associations, and other financial institutions. In 1955, Section 207 of the National Housing Act was amended to include authorization of FHA insurance for mortgages used to finance the construction or rehabilitation of mobile home parks that meet FHA mobile home park development standards. Selected statistics on FHA-insured parks are shown in Appendix I.

Today, according to Title I, Section 103, of the National Housing Act of 1972, the following terms apply:

1. Maximum interest rate.....FHA rate in effect at the time
2. FHA mortgage premium.....Premium is 1/2 percent of the
unamortized loan
3. Discount.....Dependent upon mortgage mar-
ket conditions
4. Maximum loan-to-value percentage.....Percent of FHA appraised value
5. Amount per space.....Up to \$4,712 in high cost areas
6. Maximum loan.....Up to \$1,450,000 in high cost
areas

7. Maximum term.....40 years
8. Amount of loan insured.....Up to 90 percent

In 1970 only about 80,000 sites were insured under this program. This figure dropped to about 11,000 sites in 1972, which is about two percent of the total park spaces, as the maximum FHA interest rate fell from 8 1/2 to seven percent.

The following have been instrumental in limiting the volume of FHA insured financing of mobile home parks.

1. The park owner is not allowed to sell any items in the park. This eliminates high profits that many developers make from selling mobile homes.
2. Processing time for approval of the loan takes anywhere from six months to one year. During this period fluctuations in monetary and real estate market conditions may affect the willingness of the lender to make the loan and/or the feasibility of developing the park.
3. During tight money periods, lenders are able to make loans of the same risk level at interest rates above the FHA ceiling rate.
4. The FHA sets the maximum rentals that can be charged, designed to return a maximum of 18 percent on equity. Usually the return is ten to 14 percent.

If the FHA's policy is to encourage the development of high quality mobile home parks, it must eliminate some of the aforementioned restrictions

by:

1. Speeding up the loan approval process.
2. Allowing the ceiling on FHA loans to reflect current market rates. A variable formula could be used that establishes the ceiling at three to four points above the prevailing commercial paper rate for AAA-rated corporations
3. Setting the maximum rental rates at a level that would allow a higher rate of return.

The size of the allowable loan to a mobile home park developer is 90 percent of the lowest of two figures:

1. The actual replacement cost.
2. The amount determined by capitalizing the gross rentals, which are fixed by contract to cover the debt service and provide rentals comparable to other alternatives in the area.

If the second figure is lowest, a developer receives a loan which usually covers, not 90 percent, but only 70 to 80 percent of the appraised value. This limitation requires significantly more front money on the developer's part. Also, the artificially low FHA mortgage rate makes it necessary for the borrower to provide additional front money in the form of points to the lender at the time of the loan.

With these drawbacks in mind, why would any developer consider using the existing FHA program? The explanation is that many lenders are inexperienced in the mobile home park field, and they require insurance on loans made in this area. The FHA recognizes that the current program is not serving its purpose of providing reasonably priced rental spaces for mobile home owners, and proposed legislation will not solve this problem completely. A decrease in red tape will help, but restrictions on the developer's rate of return (18 percent maximum, but usually ten to 14 percent) will continue to limit the number of FHA sponsored mobile home parks.

2.2.2 Small Business Administration

The Small Business Administration (SBA) has not been a ready source of mobile home park financing. This is due to the strict eligibility requirements that the SBA has set, which include the following:

1. The annual gross receipts of the park did not exceed \$1,000,000 in the previous fiscal year.
2. Not less than 50 percent of the gross receipts is derived from rental of spaces to those who park for periods not in excess of 30 days.
3. The development must meet the FHA "Minimum Property Standards."

The first and third requirements are reasonable, and do not prevent

many developers from utilizing SBA financing. On the other hand, the second requirement forces a developer to operate a park in which half of the space is reserved for transient recreational vehicles. Since it is difficult to accommodate recreational vehicles without disturbing permanent park residents, the quality of the park is reduced. While the SBA's policy is very effective in promoting recreational vehicle parks, it is virtually useless in the development of high quality mobile home parks.

If the SBA would like to encourage the development of high quality mobile home parks, it must eliminate restrictions on the sources of revenue. Even if revenue restrictions were eliminated, the current policy of the SBA, which only allows a maximum loan of \$100,000 (or \$150,000 if a private lending institution also provides loan funds) reduces the usefulness of SBA financing. This amount is barely sufficient to finance 35 percent (50 percent with outside lender participation) of a 100-unit mobile home park. Quality developments currently being built usually have 240 or more units, and a developer who utilizes SBA financing would also have to borrow a large amount from another source unless he possesses the necessary funds. Thus, it is unlikely that the SBA loan program will play an important role in mobile home park financing in the near future.

3.

Profitability of Parks

3.1 RATE OF RETURN

As in any real estate investment, the rate of return on a mobile home park will vary with many factors. The most important are vacancy rates, rental income, operating expenses, development costs, park size, and terms of available financing. It serves little purpose to discuss these items separately, since it is obvious how each has a bearing on the total return. Figures 4, 5, and 6 present rate of return calculations for mobile home parks. Figure 4 shows the profit potential of a typical 100-unit mobile home park, conventionally financed with an 80 percent mortgage and ten percent annual constant. A density of 6-2/3 units per acre is assumed.

Figure 5 represents average revenues and expenses of mobile home parks ranging in size from 100 to 400 spaces. It does not include financing charges. The bottom figures, "Percentage on investment," are based on total investment and not the developer's equity. The leverage a developer can obtain from financing 80 to 90 percent of the costs allows him to earn a substantially higher rate of return. For example, if a developer obtained a 90 percent mortgage with a 12 percent constant on the construction and land costs for the 400-space park in Figure 5, the return on equity (before taxes and depreciation but after debt service) is about 45 percent.

Investment

Land: 15 acres @ \$5,000	\$ 75,000
Development: 100 spaces @ \$2,600	260,000
Total costs	<u>335,000</u>
Mortgage: 80%, 10.04% annual constant (8% rate, 20 year term)	268,000
Equity	<u>67,000</u>
Working Capital	10,000
Net Investment	<u>\$ 77,000</u>

Annual Operations

Income: \$50/mo/space	60,000
Vending and Utilities	<u>7,000</u>
Total Income	67,000
Operating Expenses: 40% of income	<u>26,800</u>
Income before depreciation, int., taxes	40,200
Average Interest *	<u>13,507</u>
Net cash income	26,693
Depreciation: 20-year straight-line	<u>13,000</u>
Net income	<u>13,693</u>

Cash Flow

Cash available	26,693
Mortgage payment*	<u>13,400</u>
Net cash after mortgage	13,293
Cash yield (\$13,293 by \$77,000)	17.3%

Investment Yield

On cash income (\$26,693 by \$77,000)	34.7%
On net income after depreciation (\$13,693 by \$77,000)	17.8%

* With a 10.04 percent annual constant, the annual payment of principal plus interest is \$26,907. The average yearly principal payment over 20 years is \$13,400, and the average payment of interest is \$13,507. Note that \$13,400+\$13,507=\$26,907.

FIGURE 4 : PROFIT POTENTIAL- 100 UNIT MOBILE HOME PARK

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FIGURE 5: AVERAGE INCOME AND EXPENSE OF MOBILE HOME PARKS

FIGURE 6: TOTAL COST RECAPITULATION (CAPITAL COSTS AND
OPERATING COSTS)

Mobile Home Manufacturers Association, June, 1971.

Figure 6 shows rates of return on equity investments in parks of different sizes and densities.

Figures 4, 5, and 6 demonstrate that a mobile home park can be a profitable investment for efficient developers who have access to financing. Discussions with lenders indicate that the percentage of capital requirements they are willing to advance depends upon the developer's record and a feasibility study of the proposed park. While it may be difficult for the developer of a park to cash out completely, as in other types of developments where the lender has more experience, it is possible to obtain 90 percent financing.

Rates of return to developers using FHA-insured mortgages usually are less than those available to conventionally financed developers. FHA-insured mortgagors are limited to a maximum return on equity of 18 percent, and few are able to achieve this figure. As noted earlier, practical limitations frequently lower the developer's return to between ten and 14 percent, because front money is needed to pay points and provide additional equity when loans cover less than 90 percent of development costs.

Often the FHA-insured borrower or the lending institution is inexperienced, and the lender requires insurance and issues smaller loans than an experienced source would. Also, rentals in FHA-insured parks are set by statute at a level that covers debt service and a reasonable profit. These rents cannot be raised by the park operator in response to market

conditions, and many park operators face an earnings squeeze as operating expenses rise.

3.2 VACANCY RATE ANALYSIS

The vacancy rate is often used to measure the condition of national and local real estate markets. Nationally, there may be an abundance of a particular type of real estate unit, whether it be houses, apartments, office buildings, or shopping centers, while specific geographic areas face severe shortages. Mobile home parks are no exception.

There was a national shortage of park space in the early 1960's. However, around 1965 an increase in park development began, aided by the introduction of new financing instruments. This growth paralleled the tremendous growth of mobile home shipments from 1966 to 1969, placing the national market in relative balance by 1969.²

In 1970, park development accelerated while growth rates of shipments leveled off. This created vacancy problems in several overbuilt areas. The greatest impact was felt by new parks and substandard older parks. Well managed, older parks were less vulnerable, because of the high cost and inconvenience of moving from one park to another.

A recent study by Woodall indicates that the national overbuilding situation of 1971 has worsened, and in 1974 the vacancy rate for new parks averaged 59 percent. This high vacancy rate, which has led to a lull in park development,

resulted from a combination of overbuilding in prior years and a precipitous decrease in mobile home sales. However, as the mobile home industry recovers, these vacancies will be absorbed in relatively short order, and more park development will be needed.

Analysis of national vacancy rates can be misleading because vacancies vary widely from state to state. Paradoxically, states in which mobile homes register the least acceptance have the lowest vacancy rates, primarily a result of the artificial scarcity created by zoning restrictions.

Vacancy rates also can be misleading, because new parks, which may take a few years to fill up, have a disproportionate impact on vacancy statistics if an area has had much recent park development. Vacancy rate figures biased by a large number of new parks may not accurately reflect a region's long term requirement for spaces.

National vacancy rate figures can be used to measure the efficiency of the mobile home park development system. On a regional basis these figures provide a valuable guide to the condition of regional and local markets in mobile home spaces. Trends in regional and local vacancy rates are indicators of an area's suitability for park development, and are essential data for meaningful feasibility studies.

3.3 APPRAISAL AND RESALE OF EXISTING PARKS

The value of an existing real estate project to a potential buyer is difficult to determine. The buyer must consider the amount of income, possible tax advantages, and return on investment that would probably result from his purchase.

Earning power usually is the basis on which a selling price is derived for a mobile home park. Of the three general methods of valuation (gross income multiplier, capitalization of net income, and replacement cost), the capitalization approach seems to be used most often. Capitalization rates vary from ten to 13 percent depending upon the park's age, location, vacancy rate, and other factors normally considered in real estate appraisal. A typical income projection used to determine a park's value is shown in Figure 7.

Through negotiation based on the valuation, a final price is obtained. The seller often is willing to accept a down payment of less than 30 percent, and may be willing to take back a second mortgage note. The figure of 30 percent is used for tax purposes by the seller, since he can report the sale on an installment basis and spread recognition of gain over a longer period.

If a first mortgage exists, the buyer usually assumes the payments. The

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FIGURE 7: 15-YEAR PROJECTION FOR A MOBILE HOME PARK

Beaton, William R. "Mobile Home Parks", Real Estate Investment,
Prentice Hall, 1971, pp.284-287.

interest rate may be adjusted at the time of sale to reflect prevailing rates.

The buyer must be sure to include tax considerations in an assessment of the park's value. Figure 8 shows the financial benefits to the buyer of using accelerated depreciation if he sells the park described in Figure 7 after five years.

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FIGURE 8: EFFECT OF RAPID DEPRECIATION METHOD AND
PROPOSED SALE IN FIVE YEARS

Beaton, William R. "Mobile Home Parks", Real Estate Investment,
Prentice Hall, 1971, pp. 284-287.

4.

Tax Aspects of Mobile Home Parks

The primary federal tax aspects to be considered by a mobile home park developer are as follows:

1. Mobile Home Park (MHP) utility distribution systems (electricity, plumbing and sewer hookups, water wells, etc.) are not Section 38 property since the developer is not in the business of furnishing utility services. This means that the developer does not qualify for an investment tax credit on his investment in these park improvements.

2. The cost of construction of MHP improvements (utility systems, grading, roadways, parking spaces, trailer pads) is subject to depreciation allowances over the useful life of the improvements. Some accelerated methods may be used. It should be noted that these items are considered Section 1245 real property, and any gain upon sale is subject to recapture of depreciation. The gain is taxed as ordinary income to the extent of depreciation in excess of straight-line. Any additional gain is taxed as capital gain if the property has been held for more than six months. This depreciation-recapture rule does not allow the developer to convert all ordinary income to capital gains, but it does allow him to postpone the payment of taxes on

his ordinary income to the extent of his depreciation deduction calculated on an accelerated basis. The useful life assumed in the depreciation calculations generally is 15 years. This may vary according to the specific facts of a given case and the developer's ability to justify a different useful life. The 15 year guideline usually is significantly shorter than the improvement's actual life, and this creates an opportunity for developers to shelter additional income from current taxation.

3. Mobile home park developers have another important source of potential tax shelter that has not been used extensively to date. A developer who rents mobile homes as well as mobile home spaces is allowed depreciation deductions based on special rules designed for residential rental housing. The cost of the rental homes may be depreciated using the 200 percent declining-balance method over a useful life significantly shorter than the mobile home's actual life.

Depreciation of costs for land improvements with useful life limited to the useful life of the park (and not inextricably associated with the land itself) was tested recently in a U. S. District Court in

Maryland. The Tunnell case of 1973 involved the question of depreciability costs of canals or lagoons in two waterfront mobile home parks, as well as the cost of adapting essentially wooded areas to the parks. In this case the court ruled that the cost of the lagoons and the costs of designing and preparing the site (including clearing of land and landscaping, but not grading expenses) can be depreciated.

It is interesting that useful lives of as low as seven years have been allowed by the IRS Commissioner in private rulings. The primary evidence presented by one taxpayer was his inability to receive any longer-term financing from conventional sources. Even if "Blue Book" values are used to determine the useful life of the homes, a developer who rents homes and spaces will have an advantage since these values generally are understated.

Double-declining balance depreciation based on a seven year life would yield the developer who rents units a 28 percent depreciation deduction in the first year of rental and nearly 50 percent by the end of the second year. This can create a shelter for other park or non-park income. While the excess (over straight-line) depreciation is subject to recapture at ordinary income rates, depending on the length of time the property is held, the goal of postponing current tax payments is accomplished and the possibility of converting some ordinary income to capital gains exists.

In addition to the federal government, state and local governments require both the mobile home park owner and individual mobile home owners to pay various taxes and fees. The wide diversity of taxation methods is reflected in data, shown in Figure 9, from the Project Mobile Home Industry national park survey. These variations make it necessary to investigate the applicable methods and rates in each community that is being considered for possible mobile home park development.

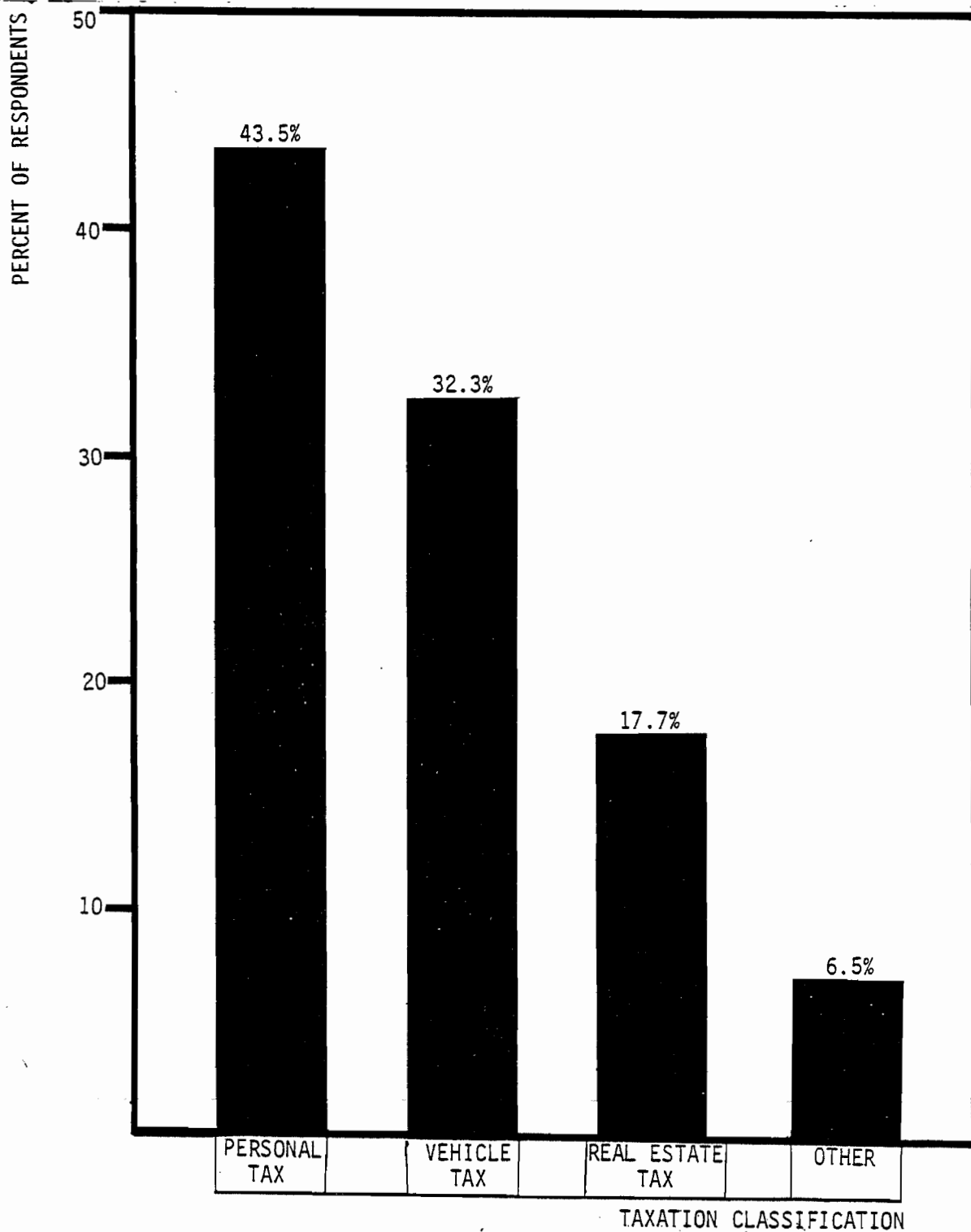


FIGURE 9 : DIVERSITY OF MOBILE HOME TAXATION METHODS
(AS EXPERIENCED BY RESPONDENTS TO THE
PMHI PARK OWNER/OPERATOR SURVEY)

5.

Real Estate Market Factors

Market research is an essential element of any real estate venture. Before commencing a project, both the developer and lender should be convinced that an adequate market exists for the proposed development. As a specialized segment of the residential housing sector, mobile home parks require, in addition to standard market research techniques, attention to details that are unique to the mobile home housing market.

It will serve no purpose to enumerate all the relevant market factors for the housing market, even if it were possible. However, it is useful to consider those market factors unique to mobile home parks:

- 1) The concept of "highest and best" use is an interesting consideration in the context of mobile home parks. An unusual amount of flexibility in land use exists. The investment time horizon for a park development is significantly shorter than for most other developed-land uses. Tracts of land on urban fringes can be profitably developed as parks, and converted after ten or 15 years to a more profitable use as land value appreciates.
- 2) In many areas of the United States, people have negative attitudes about mobile home parks. These community attitudes can be changed by a demonstration of improved industry standards, tasteful advertising, and tactful presentation of potential benefits associated with a well-managed mobile home park.

Other factors may threaten the success of a mobile home park. There continues to be a significant amount of building trade union resistance to the increased use of manufactured homes. These unions often have an impact on zoning or planning board decisions. Also, unions influence building codes that may effectively exclude mobile housing from certain areas.

3) Mobile home parks may play an important role in building new towns and resort communities. Parks can provide temporary housing for construction workers and prospective tenants while permanent homes are being built. In addition to serving as temporary construction housing, mobile home parks can provide low cost housing to service personnel who work in modern resort communities but are unable to afford the high housing costs within the resort area itself.

4) With the introduction of double-wide units having up to three bedrooms, the mobile home industry has opened large segments of the housing market that it could not satisfy in the past. In California, 72 percent of the units sold in 1972 were double-wides. These units lend themselves to cooperative and condominium parks. The opportunity to own a housing unit on a cooperative or condominium basis, at prices significantly lower than conventional housing, has proved to be an attractive alternative for many participants in the housing market.

5) Competition with conventional housing plays an important role in the success of mobile home parks. Preconceived notions about mobile home units and parks often influence consumer behavior, reducing the demand for mobile homes significantly. In addition, many people associate higher price and higher quality, without examining the actual characteristics of alternatives. Promoting consumer awareness of the low cost and high quality of many mobile home units and parks could spur consumer acceptance.

6) In the past, older parks were able to place nine or ten homes per acre because restrictive zoning limited competition. These parks often are not equipped to handle the new double-wides. Newly approved parks have been able to attract tenants from older parks by providing facilities for double-wides, placing only five or six homes per acre, and providing better amenities. In areas already having mobile home parks, potential residents exist who are convinced of the benefits available to them from their chosen housing alternative. By offering these present owners bigger and better units and lots, a built-in market can be tapped.

Although this list is not exhaustive, it presents a picture of the unique real estate market factors facing mobile home park developers. Careful consideration of factors such as these allows the developer to design a park that will satisfy consumer demand, thereby improving the prospect of a successful venture.

C.

PERFORMANCE OF
MOBILE HOME PARK
FINANCING

Performance of mobile home park financing can be assessed using many measures. For example, one might consider the availability and cost of capital for mobile home projects, the return on equity realized by park owners, or the amount of tax shelter provided investors. In the final analysis, however, the appropriate measure of overall industry performance is whether the mobile home market has reached economic equilibrium, a condition existing when the supply of park spaces equals the demand for them.

Finance is a major variable in the equilibrium formula, and good financial performance incorporates the appropriate incentives and rewards that lead to good overall performance. Unfortunately, in many parts of the country mobile home park space demand far outweighs supply. The survey of mobile home dealers conducted for this study (PMHI/DS) indicates that some dealers could have sold over 30 percent more homes if enough park space were available. Poor financial performance is a major cause of this disequilibrium.

One manifestation of an excessive demand situation is the "closed park." Data from the Project Mobile Home Industry Park Survey (PMHI/PS) show that almost nine percent of all parks are closed. These parks reap monopoly profits at the expense of consumers, by charging entrance fees and requiring that park dwellers purchase homes from the park owner's dealership for up to \$2000 above what other dealers charge. Furthermore, it is very difficult for residents of closed parks to move, because of additional costs incurred.

Economic disequilibrium prevalent in the mobile home industry can be resolved by the development of more mobile home park space. However, this only will occur if lenders are willing to invest more capital in the industry.

1.

Factors Causing Diséquilibrium

In order to promote a successful mobile home project, developers must overcome many obstacles; zoning barriers and lack of capital are two. Zoning restrictions increase preconstruction costs for public relations and governmental lobbying. Lack of capital can result in greater equity requirements and interest charges than would be the case in other real estate developments. The net effect is a lower return on equity for the developer, and less incentive to build a quality mobile home park.

1.1 ZONING

Zoning restrictions directly affect the feasibility of a mobile home park development. However, they also can affect financing arrangements in a more subtle fashion. One of the greatest constraints working against mobile home park financing is the psychological effect of stringent zoning restrictions on the willingness of lenders to make mobile home park loans. Where mobile home parks are considered a blight by the community, lenders are unwilling to upset the local populace by providing funds.

Although strict zoning is a handicap at first, it can turn into a great advantage for the park owner. If he is the only developer in the area, it is possible to maintain high occupancy levels at high rentals. Thus, strict zoning results not only in fewer park spaces, but also in higher costs to the consumer.

1.2 LACK OF AVAILABLE CAPITAL

Historically, there has been a lack of capital to finance mobile home parks, resulting in fewer park spaces built and homes sold. Lenders who have never made mobile home park loans are reluctant to enter a field that they do not understand. Furthermore, they are still influenced by the image of the old trailer court. In areas such as Florida, California, and Arizona, reputable developers with well-planned and carefully analyzed projects can obtain funds at interest rates and terms that compare favorably with other housing developments. More important, they sometimes have to provide a down payment of only ten percent or less. Unfortunately, this financial climate does not exist in most parts of the country.

The shortage of low-cost capital in many areas results in lower quality parks that add to the bad image of mobile homes. This, in turn, leads to stricter zoning laws and a decrease in the amount lenders are willing to invest in mobile home park loans. Lack of park space also results in a large number of mobile homes located along the roadside, further contributing to the bad image and resulting lack of capital. These relationships are shown in Figure 10.

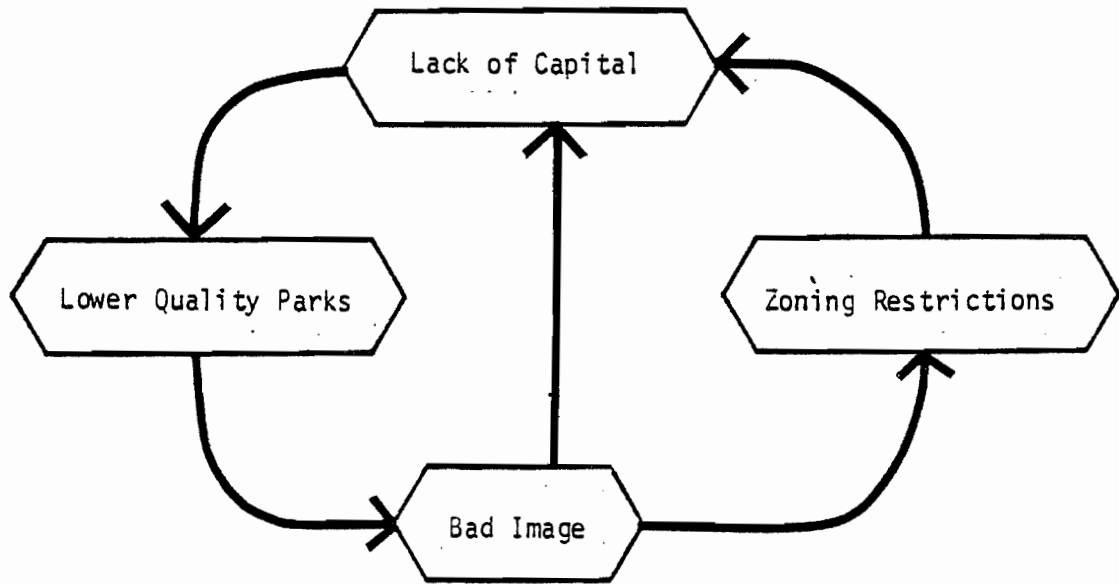


FIGURE 10 : ONE RESULT OF LACK OF CAPITAL

As capital has come into the industry, however, this circle is beginning to break. Better parks are being built, the image of mobile homes and parks is improving, and zoning barriers are easing.

2.

Effects of the Financial Climate
on Developers

2.1 LENDER'S VIEW

Many lenders still view mobile home parks as single purpose real estate that is not easily converted to other uses. As a result, park developers have to be content with higher down payments, shorter terms, and higher interest rates than developers of other types of real estate.

The economic life of mobile home parks usually is estimated to be 35 or 40 years. Lenders, however, rarely provide longer terms than 25 years, and customarily allow a 15 year amortization. This is a disincentive to investors, because they need a greater cash flow to meet the higher mortgage payments.

However, the greatest constraint to a developer is the higher down payment requirement. In effect, this lowers an investor's return on equity and encourages him to channel his money and energies elsewhere.

2.2 INCENTIVES FOR MOBILE HOME PARK DEVELOPMENT

Considering all of the problems, one might ask why developers would consider a mobile home park rather than a conventional real estate investment. There are several advantages associated with mobile home parks that do provide adequate incentive.

Mobile home parks are less risky than many other types of real estate investment. Since mobile homes are the least expensive form of new housing and conventional housing costs are increasing rapidly, more people are turning to the mobile home living alternative. This increasing market improves a park developer's chances for success.

In addition to lower risks, mobile home parks require a substantially smaller investment than comparable conventional housing projects. Park investment costs are closely associated with land values, whereas conventional construction is associated with labor costs. Although both land and labor are becoming more expensive, the mobile home park developer can reduce a major portion of his costs by selecting a site that has a relatively low price.

In addition, a developer probably will realize land value appreciation. The conventional real estate developer, having a greater part of his

investment tied up in construction costs than does the mobile home park developer, will not realize the same relative gain as the value of land increases.

Another incentive for the mobile home park developer is added flexibility. Conventional construction is more permanent than mobile home park construction. While the mobile home park developer can turn his land to a more profitable use in ten or fifteen years as increasing land values justify other types of projects, the conventional developer is constrained by the physical presence of his buildings.

3.

Summary

Under ideal conditions there is ample incentive for a developer to invest his funds and energies in mobile home parks. However, lending institutions and mortgage bankers have been laggard in their acceptance of the mobile home as a legitimate living alternative. Most financial inefficiencies in the industry result from poor lender response to capital demands of mobile home park developers, but this appears to be changing as the quality of parks improves and lenders obtain more experience in this field.

Only when the financial climate is ripe for park development can economic equilibrium prevail in the mobile home park system. Until then rates of return will be artificially restrained, resulting in lower incentives to the developer and an inadequate number of park spaces. With more lender participation, rates of return will be controlled by natural economic forces and park supply will approach demand. The resulting efficiency will be beneficial to all industry participants.

D.

TRENDS IN PARK FINANCING

While most of the items below have been discussed in greater detail in other sections of this study, a summary of some of the trends affecting the mobile home park industry will be useful.

Park Size

Results from the PMHI/PS of 130 mobile home operators indicate that parks are growing larger and more costly to build. Comparing the 23 survey respondents who built parks during the 1970's with the 12 respondents who developed parks during the 1960's, a trend is easily discerned. Figure 11 indicates that 95 percent of the 1960's respondents built parks having 100 spaces or less, whereas only 75 percent of those developing during the 1970's built parks with 100 spaces or less. Figure 12 indicates that the cost per park space has increased during the past decade, which reflects both increased emphasis on park quality as well as inflation in the construction industry. Figure 13 shows the combined effect, with higher total development costs in the 1970's than the 1960's.

Land Costs

One important trend that park developers must consider in future developments is that, barring major shifts in living patterns, the cost of land will decrease less rapidly with distance from the city than in the past. As a result, park developers must begin to look at land costs in a different light. In the future, it will not be uncommon for a successful park developer to pay \$1000, \$2000, or even \$4000 per mobile home space for land. This could make the costs of renting space to the consumer

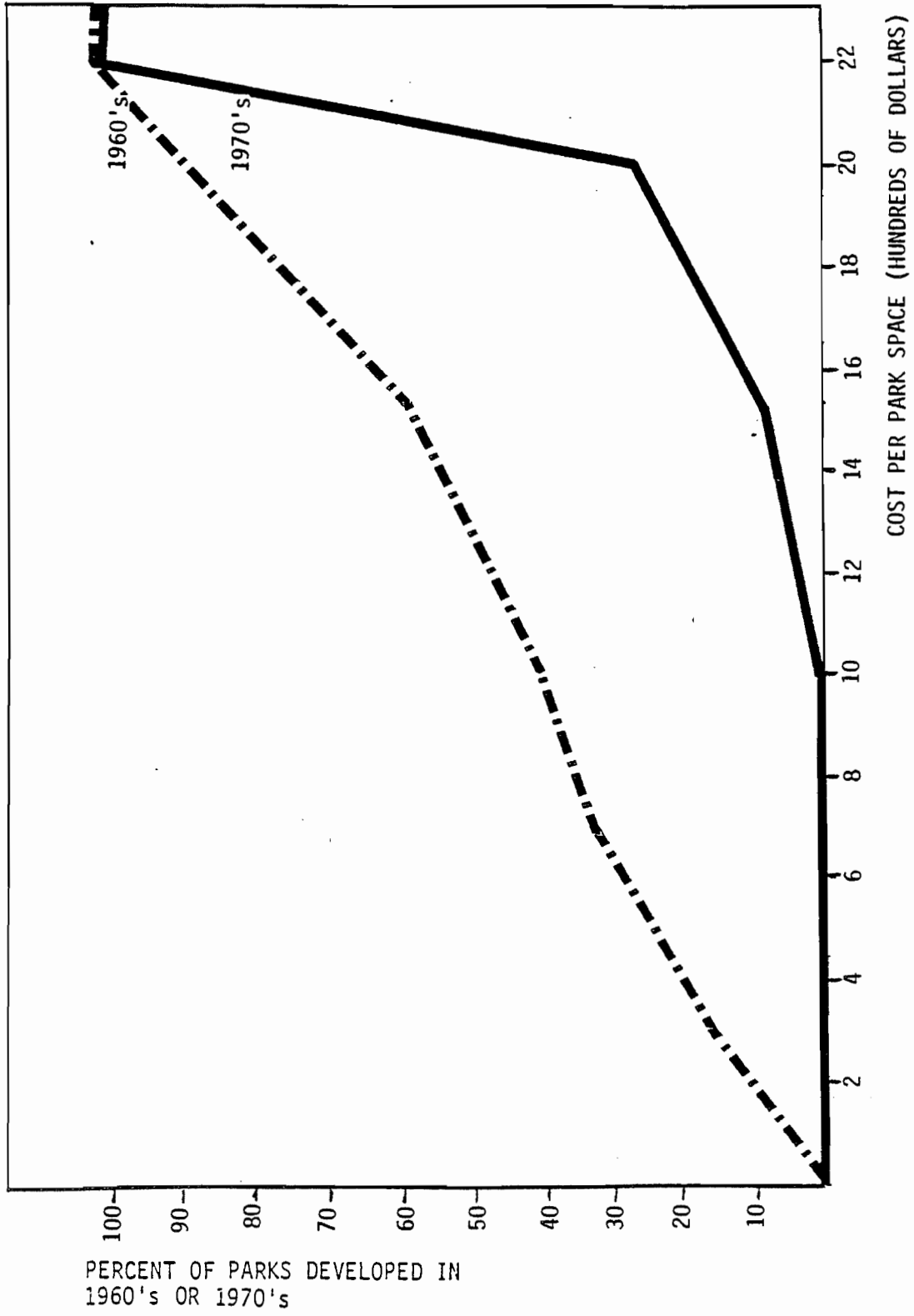


FIGURE 12: TREND IN COST PER PARK SPACE

prohibitive. Thus, one may expect an acceleration in the development of condominium parks, especially in high land cost areas.

FHA

The FHA Section 207 program aroused some interest in 1969 and 1970 when FHA ceiling rates were 8-1/2 percent. However, few park spaces were generated by this program, primarily due to restrictions on developers and lenders. Proposed legislation currently is being studied, but a major overhaul of present programs is necessary before government sponsored parks will play an important role.

Mobile Home Industry Production

Mobile home shipments peaked in 1973 and have been declining on an annual basis since then. The current softness in demand for mobile homes is a result of the recession, which was at its nadir at the end of 1974. As the economy recovers from this downturn, increased consumer income may spur demand. However, improvement in demand will be dependent both on the strength of economic growth and the willingness of lenders to resume their mobile home investments.

Condominiums and Subdivisions

Although still a minor portion of the mobile home park industry, increased use of condominiums and subdivision parks may have a significant effect in the near future. Many of the new parks in some areas,

particularly Florida, are being developed on a condominium basis. With respect to financing, this trend may result in less dependence of the developer on long term interest rates. Since interest costs on construction loans have to be carried for a short term of one or two years, they only add a marginal amount to overall construction costs. This trend may reduce fluctuations in the production of park spaces due to mortgage market shortages.

Closed Parks

Public regulation and consumer pressure may play an important role in the review of policy on closed parks. Artificial restraints on park entrance are being attacked by more groups than ever before, and some dealers are discovering that they may be losing money because of added difficulties in filling their parks with residents.

Lender Participation

A variety of lenders are gaining expertise in the field of mobile home parks. Individuals, banks, corporations, life insurance companies, and partnerships are participating in a field that was viewed not very long ago as quite risky. Although many of these lenders still perceive mobile home parks as risky ventures, they seem to be placing more confidence in developers who have demonstrated their competence and the feasibility of a proposed park project.

This confidence is reflected in larger loans, and better rates and terms. The PMHI/PS clearly demonstrates that banks, as indicators of lenders in general, have been more receptive to mobile home projects in the 1970's than in earlier decades.

For example, Figure 14 indicates that 80 percent of the respondents who developed parks during the 1950's received bank loans for less than \$50,000, compared to 37.5 percent of those who developed parks during the 1960's and 22.2 percent of those during the 1970's. Furthermore, the figure shows that the largest loan values granted to developers during the 1970's were three times the magnitude of those granted to developers during the 1960's. Trends in interest rates and loan terms are illustrated in Figures 15 and 16.

Some lenders, life insurance companies for example, even hold an equity share of financed parks. This practice, however, appears to be a function of the tightness of money markets and could change over time. Developers may be unwilling to relinquish part of their ownership position if alternative sources of funds are available.

Large Corporations

Recently developed parks generally appear to be larger operations than those built in the past. Large corporations and developers are building 300 to 1000 space parks, and some are developing parks with room for expansion to 5000 spaces. The magnitude of funds necessary for these developments precludes many small, local developers who have no

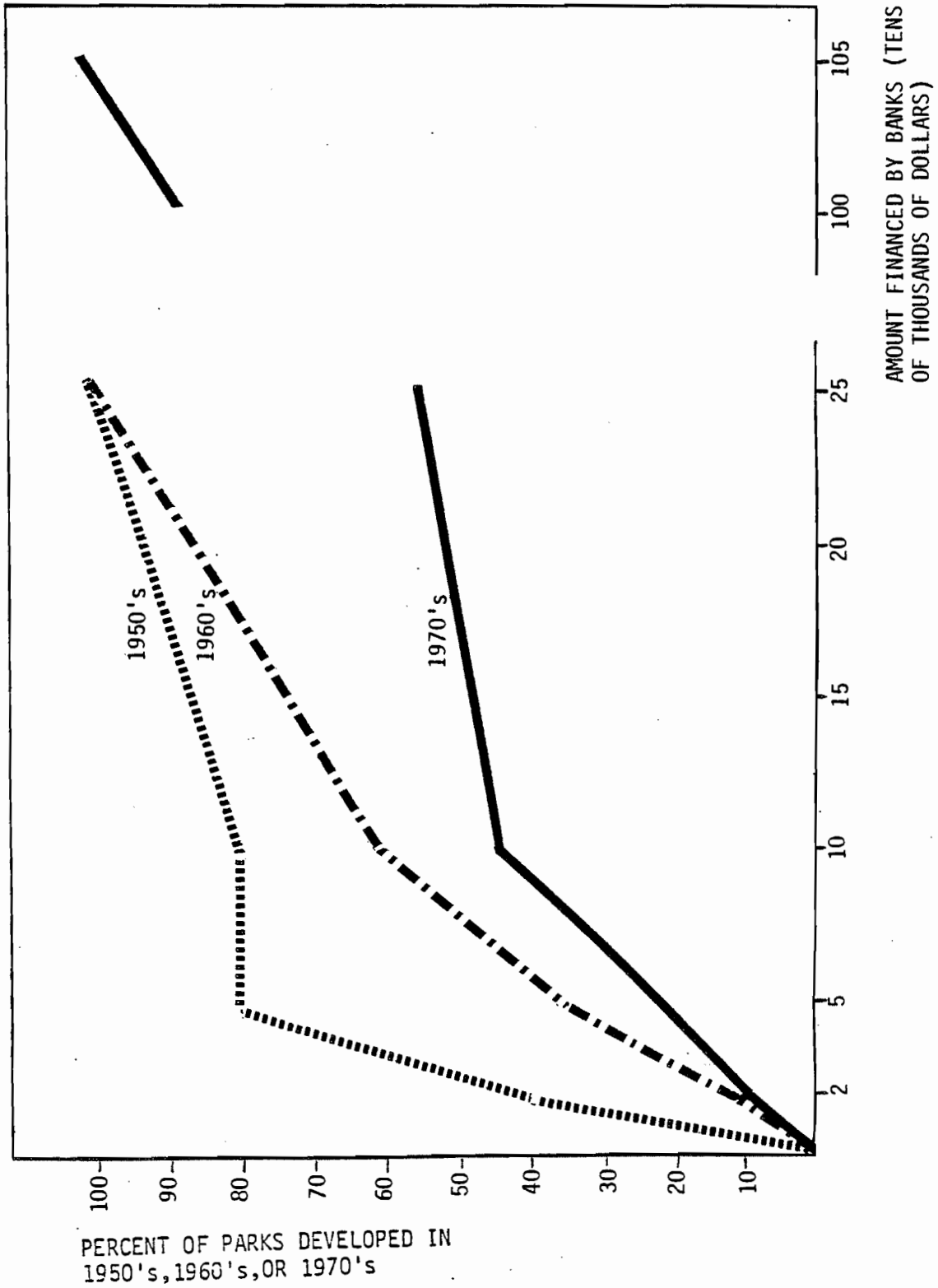


FIGURE 14: AMOUNT OF BANK LOANS FOR PARK DEVELOPMENT

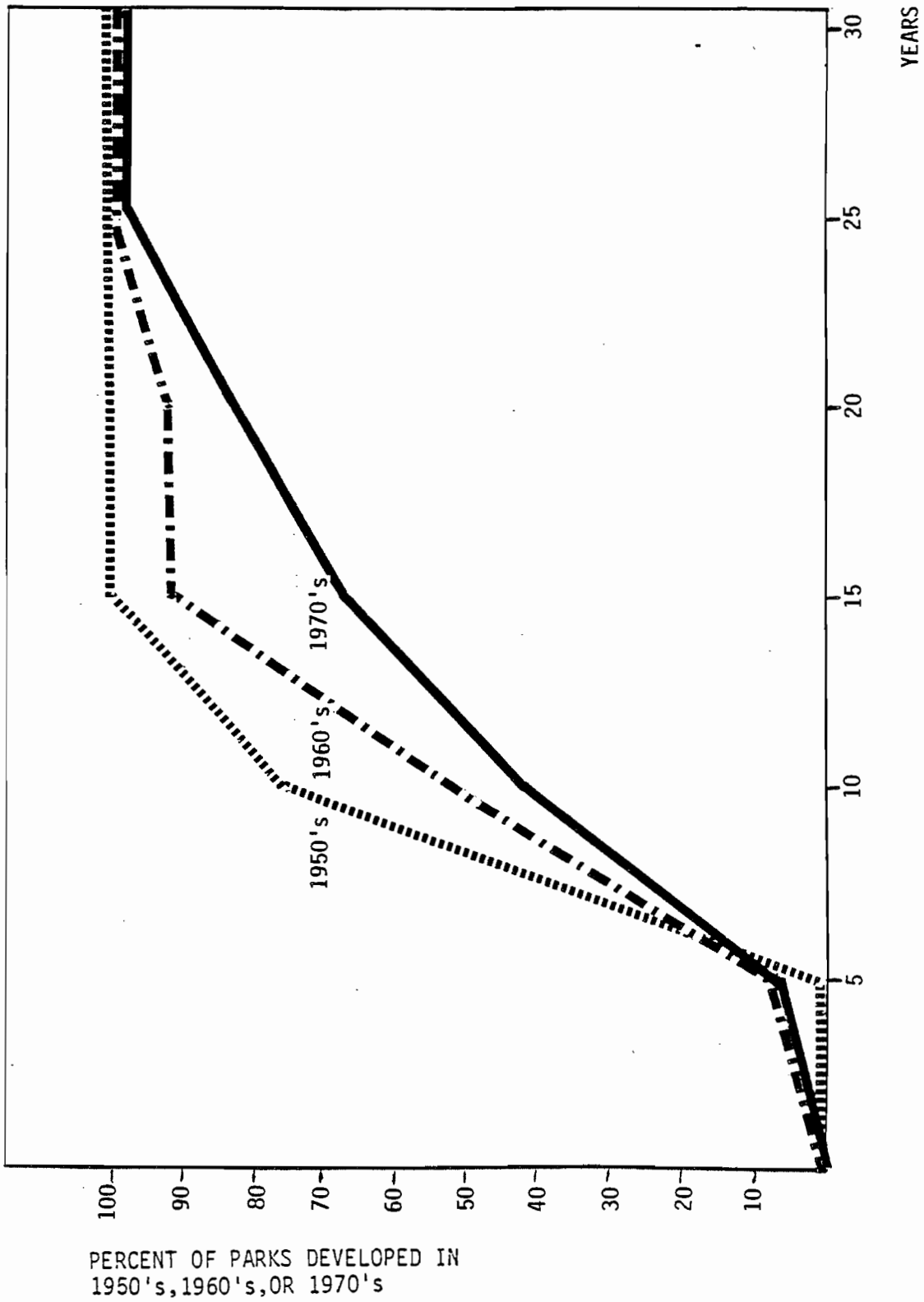


FIGURE 16: BANK LOAN TERM

connections with financially sound backers.

As huge developers and companies specializing in park development expanded their role in the industry, the financial control of parks has been greatly improved. Computer-based accounting and collection systems have been created to produce accurate park performance reports and operating statements. Weekly park status reports provide timely data on a number of key items, and tight approval procedures ensure proper review of all significant expenditures. These systems have improved the control and profitability of mobile home parks.

Amenities

New parks are growing bigger and better, and their amenities have improved substantially over those provided by their predecessors. Besides the standard shuffleboard courts, well-equipped recreation and game centers are common. Multiple swimming pools and golf courses are becoming accepted, and even expected features. Modern managers must be able to fulfill the increasing needs and desires of park residents.

Costs, Rentals, and New Units

In addition to land costs, construction and operating expenses have increased significantly over the past ten years and probably will continue to do so. To offset these costs, park developer/operators have been forced to increase their monthly space rentals. This has

been accentuated by increased lot sizes needed for the popular double-wides, and the trend for lower densities per acre as demanded by new park residents. Figure 17 demonstrates the recent shift away from the narrower units to 12 foot, 14 foot, and double-wide homes.

THIS PAGE REPRESENTS PAGE 602, WHICH HAD THE FOLLOWING
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FIGURE 17: SHIPMENTS BY SIZES

Mobile Home Financing - Twenty Third Annual Survey, Mobile
Home Manufacturers Association, 1974.

E.

POTENTIAL FOR IMPROVING
FINANCIAL PERFORMANCE

The financial performance of the mobile home park industry has been characterized as poor in earlier pages. It has been stated that the lack of low cost capital results in higher costs to the consumer and lower returns to the developer than would otherwise be the case. The net effect has been a demand for mobile home park spaces that exceeds the supply in many sections of the country.

There are several ways to reduce the imbalance. For example, it is possible to remedy this condition by raising rental prices so that demand decreases. However, this solution would alter the low cost nature of the mobile home living alternative. From the consumer's perspective, a more desirable solution probably would consist of these three broad elements:

1. Government regulations that would encourage developers and lenders to become involved in mobile home park projects.
2. The use of creative financing by developers, mortgage brokers, and lending institutions.
3. Willingness of lending institutions to view park developments as they do other real estate developments, requiring a similar percentage down payment and offering similar interest rates and terms.

Taken together, these elements will provide the developer with a greater

return on equity than he now earns, and will encourage construction of more park spaces.

1.

Policy Alternatives
for Government

1.1 CLOSED PARKS

In order to reduce excess profits of closed park owners, it is necessary to prohibit practices that require a consumer to purchase his mobile home from a particular dealer and pay an entry fee. Such legislation would reduce costs to the consumer and, therefore, improve performance in the industry. However, one should not expect this to be a cure-all for park problems. Unless more spaces are built the park owner still will be able to charge excessive monthly rents.

1.2 TAXATION

The wide variation of state tax policies as applied to mobile homes was detailed in Chapter 4 on Tax Aspects of Mobile Home Parks. Many sources close to the industry consider it essential that a uniform approach be developed. Mobile homes are real property and serve as personal residences. Taxation and licensing fees as motor vehicles are inconsistent with these facts. Equalization of taxes for owners of mobile homes with those paid by owners of conventional housing probably will play an important role in disputes such as those concerning zoning and community acceptance. The section on "Taxation" in the volume on Public Regulation concludes that real property taxation of mobile homes would lead to significant benefits for the mobile home industry in general and for park financing in particular.

1.3 BUILDING CODES

One major deterrent to the success of manufactured shelter has been the local building code. Still today, it is difficult to plan an efficient production line approach to home building, because manufacturers must take into account special requirements of the communities in which the product will be marketed. To build a manufactured home that would satisfy the most stringent requirements of every code would be extremely expensive, effectively pricing the home out of the economical housing market.

Mobile home builders have been able to circumvent this problem by successfully developing an industry building code. Extensive lobbying has won acceptance of this code by most states, and, in fact, made possible the financial success of mobile home manufacturers. However, this has been achieved only because mobile home manufacturers tacitly agreed to ensure an architectural distinction between their product and a conventional home. Any attempt to remove this architectural distinction, by abandoning wheels under the homes for example, is almost sure to invite strong labor union and code enforcement agency resistance.

HUD's national mobile home construction and safety standards (based

on the industry code) will become effective in June 1976 and promise to resolve the building code impediment to mobile housing. HUD will delegate most administrative and enforcement functions to the individual states, and the "prestigious", joint federal/state initiative should aid the mobile home industry in improving its image and, in turn, stimulating the financial sector to view mobile home park financing more favorably and seriously. Federal and state governments can help in this educational task.

For a more complete discussion of this aspect, the reader is directed to the section on Building Code Regulation in the volume on Public Regulation.

1.4 ZONING

Local zoning has had an impact on mobile home sales. Many communities, particularly in the Northeast, have exclusionary zoning policies, which preclude any form of manufactured housing within their boundaries. Although these policies are a response to the "trailer court" image that many have of mobile home parks, they are also an attempt in some cases to exclude from a community those who do not have the resources to buy a conventional home.

Again, it is state government that must oversee zoning restrictions if de facto ghettos resulting from zoning policies are to be eliminated. Hopefully, state agencies are able to rise above local considerations to recognize those areas where well-designed mobile home parks should be encouraged.

For a more detailed discussion of this aspect, the reader is directed to the section on Land Use Controls in the volume on Public Regulation.

1.5 GOVERNMENT INSURANCE PROGRAMS

Government loan insurance programs, such as those offered by the FHA, can promote park development only if they are attractive to both developers and lenders. Developers must be allowed a reasonable return on their investment, higher than the 18 percent currently allowed. Lenders must have the ability to charge realistic interest rates, geared to the prime rate, or they will invest funds in more lucrative areas. Only by thoroughly re-evaluating these programs will government agencies realize their potential in promoting mobile home park development.

2.

Financial Alternatives
for Developers

2.1 LEASING

In most forms of commercial real estate development the practice of leasing land for a project has become widespread. Mobile home parks are no exception. In many circumstances developers have found that their profits from a proposed park are maximized by a land lease agreement, with land rents usually running between eight and 12 percent of gross income. The necessary conditions usually are high land costs, alternative land uses, and reluctant sellers.

In areas of high land costs some parks become feasible through leasing because the initial investment is reduced, rents can be deducted as expenses, and a greater amount of funds are available for financing improvements. If the landowner anticipates a more profitable use for the land as its value increases over the years, he may be unwilling to sell and leasing is the only alternative.⁴ In either case, a leasing arrangement makes the development possible.

From the lender's point of view a leasehold mortgage may prove to be a good investment because the amount required by the borrower is significantly lower. The lender must take a few precautions, however. A subordination agreement, pledging the land as security for the mortgage

loan, is preferable to the lender. If this is not obtainable the lender should insist on hypothecation of the lease (i.e., in case of default on the mortgage the lender can assume the position of lessee and continue to keep the lease in effect).⁵ Also, the lease should run at least ten years beyond the loan's maturity.

Lease arrangements may have a fixed rental or percentage lease basis. It often is desirable from the lessee's point of view to have an escalating lease during the first few years, which allows a reasonable period for fill-up before higher payments begin.

2.2 SUBORDINATED SALE-LEASEBACK OF LAND

With land becoming more expensive and representing a larger percentage of the total project cost, mobile home park developers should begin to examine the subordinated sale-leaseback as a source of capital. In this arrangement a developer builds a park, sells to investors for an immediate return of his capital, and then leases back the park to operate it.

Lease guarantee insurance reduces the purchaser's return, but may be necessary to satisfy the lender. Therefore, the developer should incorporate this insurance cost in his income projections.

2.3 STANDBY COMMITMENT

The standby commitment has been used by park developers in recent years to obtain a construction loan. Usually the commitment is written for an interest rate well above market levels, with the intent that it never will be funded. The high interest rate provides the developer with a strong incentive to obtain permanent long-term financing.

By obtaining the commitment, the developer can build his mobile home park without being locked into a permanent loan that has no prepayment privileges. If the park rents as well as expected, the developer will be able to refinance and obtain a permanent loan with a longer amortization period and lower rates than provided for in the commitment. At the same time, he is establishing a track record that will enable him to obtain better terms on future construction loans and permanent loans.

The fee for a standby commitment is one-half to one point for every six months that the commitment is outstanding, but longer term commitments generally have lower rates. Although this may seem a heavy charge for many developers, it has been a vehicle for obtaining funds that otherwise would not be available. Furthermore, it has acquainted many lenders with mobile home park financing, and has established a foundation upon which park developers can build a business relationship with lenders.

2.4 RENTAL OF MOBILE HOMES

One park arrangement that has not been used extensively provides for renting both the park space and mobile home to residents. This mobile home apartment scheme allows a park owner to maintain the value of the homes on his balance sheet. The tax shelter resulting from the depreciation of this asset would play a part in the feasibility analysis of the project.

This scheme opens a new market of potential residents, comprising those who do not have sufficient funds to purchase a mobile home. Although this could decrease the vacancy rate, a developer must take care that park quality does not deteriorate. He will have to compensate for the fact that residents will not have pride of ownership, characteristic of home owners, by providing extra maintenance services.

2.5 CONDOMINIUM PARKS

Construction of condominium parks increases the availability of financing by freeing developers from large mortgage debt, and allowing them to concentrate on development rather than park operation.

Condominium parks also allow the consumer to obtain conventional mortgages with lower monthly payments rather than loans with high add-on interest charges. The resulting lower cost should make mobile home living more attractive.

2.6 LEASE-OPTION-TO-BUY FOR CONSUMERS

Many developers who want to build condominium parks are concerned that consumers may not be able to obtain adequate financing to purchase both the land and the home. One possible solution is to establish a condominium park and sell lots to those who can obtain the necessary funds. Those who do not have funds to purchase the lot can rent a space with an option-to-buy it within a given period, such as seven years. This will give a consumer enough time to accumulate funds needed to meet down payment requirements on the land.

In such cases the individual should obtain a liberal prepayment provision on his mobile home loan, so that when he does purchase the land he can refinance the home and land with a conventional mortgage. In fact, if the purchaser has a lease-option-to-buy, perhaps the FHA could insure a conventional mortgage from the time he purchases the home.

3.

Policy Alternatives
for Manufacturers

3.1 MANUFACTURER PARTICIPATION IN PARK DEVELOPMENT

Manufacturers could increase the industry's flow of capital by entering into joint venture or limited partnership arrangements with local dealers. With the manufacturer's credit behind a park development, the park venture should be able to secure better terms from lenders. Such an arrangement also should improve the relationship between manufacturer and dealer. The dealers themselves could be allotted a percentage of the park space in proportion to their equity in the partnership. In addition, a certain percentage of park spaces could be set aside for those dealers who exceed their allotted park space. This would reduce the park's fill-up time.

3.2 PUBLIC RELATIONS

Although their attitude is beginning to change, lenders traditionally have been reluctant to commit funds to mobile home park developments because they lacked experience in this area and were influenced by the image of low quality parks. Although the resulting shortage of capital directly affects developers who must channel their energies elsewhere, it is the manufacturers and dealers who ultimately suffer.

Both manufacturers and dealers would profit from an extensive public relations campaign directed at the financial community. Such a campaign might emphasize the high profit potential and relatively low risk of modern parks. In addition, presentations to municipal government representatives could show the positive community impact of a high quality park and would increase support at the local level. An effective publicity campaign expanding on that currently conducted by the Mobile Home Manufacturers Association should increase the flow of capital into the industry and improve receptivity to park development.

E.
SUMMARY

Mobile home parks can be sound investments. As in conventional real estate developments, a mobile home park investor can attain many financial goals such as capital gain, rapid recovery of equity, and tax shelter for other income. The degree to which these goals are met depends upon the sophistication of project developers.

Mobile home parks have some advantages over conventional real estate developments. A mobile home park has lower capital requirements than does a comparably-sized conventional project. A larger percentage of a mobile home park investment is dedicated to the purchase of land, and land values probably will appreciate. A mobile home park can be removed after ten or 15 years, if the land becomes valuable enough to support a conventional development.

Despite these advantages, mobile home park developers have generally experienced difficulty in attracting funds. One reason is that mobile home parks have a "trailer camp" image. The combination of this poor image and belief that mobile home park occupants do not carry a fair share of the local tax burden has led to stringent local zoning ordinances against such developments.

Financial institutions, not wishing to arouse the ire of local citizenry, have avoided mobile home park loans. This has resulted in an undercapitalization of those parks that have been built, thereby creating a condition which supports the trailer camp image.

Recently this chain of events, leading from undercapitalization to low quality parks, has begun to weaken. There is evidence that the financial community is maturing with respect to mobile home parks. As mobile homes continue to have an increasing impact on the housing market and lenders become more familiar with the advantages of mobile home park financing, sophisticated financing approaches will find greater use. Consumer demand for low-cost housing, combined with lender desire for efficient utilization of funds, will lead to a nation-wide expansion of the favorable lending climate that is now available for park development in states such as California, Arizona, and Florida.

G.

FOOTNOTES

FOOTNOTES

1. Barrons, "Mobile Homes," March 16, 1969, p. 3.
2. "Mobile Home Market," First National City Bank, 1970, p. 6.
3. E. Dean Shipley, "A Projection of the Demand for Mobile Home Park Spaces," Park Management and Developer, February/March 1976. p. 24.
4. "What's Next for Mobiles," Professional Builder, November, 1969, p. 14.
5. Ibid.

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APPENDIX

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A.

INDUSTRIAL ORGANIZATION

Woodall's Star Rating System
1968 versus 1972 Standards

WOODALL'S MOBILE HOME AND PARK DIRECTORY
STAR RATING SYSTEM FOR 1968WOODALL 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:

- 1A. Fair overall appearance.
- 1B. Patios on most lots. May be concrete, asphalt, wood, or some suitable material.
- 1C. Grass, rock or shell to cover ground.
- 1D. Streets fair to good. May be dirt, asphalt or gravel in reasonable condition.
- 1E. Restrooms clean, if any.
- 1F. Adequate laundry or laundromat nearby.
- 1G. If fences allowed, must be neat.
- 1H. Mail service.
- 1I. Homes may be old models but show evidence of care.
- 1J. Manager available some hours of each day

WOODALL TWO STAR PARK

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

- 2A. Landscaping--some lawns and shrubs.
- 2B. Streets in good condition. Must be dust free of crushed rock, gravel or shell minimum.
- 2C. Neat storage.
- 2D. Well equipped laundry or laundromat nearby.
- 2E. 220 volt connections available.
- 2F. If children accepted, park should have play area.
- 2G. Park free of clutter, such as old cars and other abandoned equipment.
- 2H. Well maintained and managed.

WOODALL 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:

- 3A. Attractive entrance.
- 3B. All mobile homes must be in good condition.
- 3C. Awnings and cabana rooms on some homes in southern areas.
- 3D. Some spaces for large mobile homes.
- 3E. Paved or hard surfaced streets.
- 3F. Off-street parking or streets wide enough for safe on-street parking.
- 3G. Good lawns or substitute throughout, shade trees, some shrubs where climate permits.
- 3H. Concrete patios or the equivalent on all lots.
- 3I. All lots neat and attractive.
- 3J. All park buildings in good repair.
- 3K. Good management.

WOODALL FOUR STAR PARK
(There are two categories. See item 4K.)

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:

- 4A. Good landscaping.
- 4B. Most homes skirted with metal skirts, concrete block, ornamental wood or stone.
- 4C. Paved streets, edged or curbed.

- 4D. Uncrowded lots.
- 4E. Underground utilities if permitted by local conditions and authorities.
- 4F. Most tanks, if present, concealed.
- 4G. Any hedges or fences must be attractive and uniform.
- 4H. Awnings, cabanas, or porches on most homes in southern areas.
(Excepting double-wide units.)
- 4I. Most lots to accommodate large mobile homes.
- 4J. Where row parking of homes exists, all must be lined up uniformly.
- 4K. 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.
- 4L. Excellent management.

WOODALL 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:

- 5A. Well planned and laid out spacious appearance.
- 5B. Good location in regard to accessibility and desirable neighborhood. In some locations park should be enclosed by high hedges or ornamental fence.

- 5C. Wide paved streets in perfect condition. Curbs or lawns edged to streets, sidewalks, street lights, street signs.
- 5D. Homes set back from street.
- 5E. Exceptionally attractive entrance and park sign.
- 5F. Patios at least 8 X 30 ft. (Excepting double-wide units.)
- 5G. Paved off-street parking such as carports or planned parking.
- 5H. All homes skirted.
- 5I. All hitches concealed. Any existing tanks concealed.
- 5J. 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.
- 5K. Beautifully equipped recreation hall with kitchen. Room for community gatherings, tiled restrooms, etc.
- 5L. Uniform storage sheds or central storage facilities.
- 5M. All late model homes in excellent condition.
- 5N. At least 60% occupancy in order to judge quality of residents which indicates park's ability to maintain a five star rating between inspections.
- 5O. All empty lots grassed, graveled or otherwise well maintained.
- 5P. 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.
- 5Q. Superior management interested in comfort of residents and maintenance of park.

WOODALL'S MOBILE HOME AND PARK DIRECTORY
STAR RATING SYSTEM FOR 1972

WOODALL 1 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:

- 1A. Fair overall appearance.
- 1B. Patios of all-weather areas on most lots. May be concrete, asphalt, wood, or some suitable material.
- 1C. Grass, rock, or shell to cover ground.
- 1D. Streets fair to good. May be dirt, asphalt, or gravel in reasonable condition.
- 1E. Restrooms clean, if any.
- 1F. If fences allowed, must be neat.
- 1G. Mail service.
- 1H. Homes may be old models but show evidence of care.
- 1I. Manager available some hours of each day.

WOODALL 2 STAR PARK

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

- 2A. Landscaping--some lawns and shrubs.
- 2B. Streets in good condition. Must be dust free, of crushed rock, gravel or shell minimum.
- 2C. Neat storage.
- 2D. Well-equipped automatic laundry or laundromat nearby.
(requirements may be waived in park where all residents have laundry in home.)
- 2E. Park free of clutter, such as old cars and other abandoned equipment.
- 2F. Well maintained and managed.

WOODALL 3 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.

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

- 3A. Good quality overall appearance. Park sign near entrance.
- 3B. All mobile homes must be in good condition.
- 3C. Awnings and/or cabana rooms on some homes in southern areas.
- 3D. Some spaces for large mobile homes.
- 3E. Paved or hard surface streets.
- 3F. Off-street parking or streets wide enough for safe on-street parking.
- 3G. Good lawns or substitute throughout, shade trees, some shrubs, where climate permits.
- 3H. Concrete patios, raised porch, cabana, or the quality equivalent suitable to the climate on all lots.
- 3I. All lots neat and attractive.
- 3J. All park buildings in good repair.
- 3K. Good management.

WOODALL 4 STAR PARK

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:

- 4A. Good landscaping (trees, shrubs, flowers, grass or stones).
- 4B. 75-98% of homes skirted with metal skirts, concrete block, or stone properly installed and well-maintained.
- 4C. Paved streets, edged or curbed.
- 4D. Uncrowded lots.
- 4E. Underground utilities if permitted by local conditions and authorities.

- 4F. All tanks and propane bottles concealed. No tanks or bottles preferred.
- 4G. Any hedges or fences must be attractive and uniform.
- 4H. Awnings, or cabanas, or porches on most homes in southern areas. (Excepting double-wide units)
- 4I. Most lots to accommodate large mobile homes. No 8' wide homes.
- 4J. Off-street parking.
- 4K. If children are allowed, there must be a play area, preferably equipped.
- 4L. Adequate community hall. 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.
- 4M. Excellent management.

WOODALL 5 STAR PARK

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

- 5A. Well-planned and laid out spacious appearance.
- 5B. Good location in regard to accessibility and desirable neighborhood. In some locations parks should be enclosed by high hedge or ornamental fence.

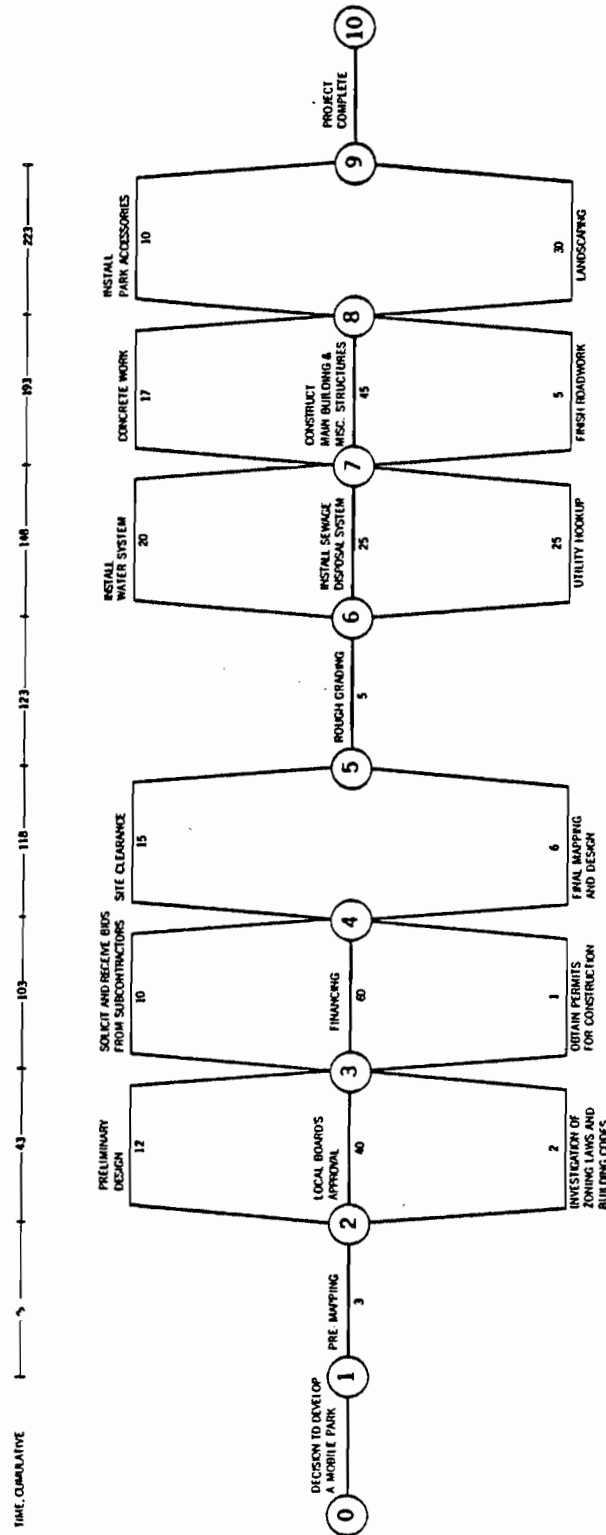
- 5C. Wide paved streets in perfect condition. Curbs or lawns scrupulously edged to streets. Sidewalks (from street to the home), street lights, street signs.
- 5D. Homes set back from street.
- 5F. Patios or porches at least 320 sq. ft. on all homes. (Excepting double-wide units)
- 5G. Paved two-car off-street parking or planned parking for a second car.
- 5H. All homes completely skirted with quality skirting.
- 5I. Awnings or cabanas and carport on all homes.
- 5J. Uniform storage sheds at all homes.
- 5K. All hitches and jack posts concealed. No tanks or bottles.
- 5L. Beautifully equipped recreation hall with kitchen. Room for community gatherings, tiled restrooms, etc.
- 5M. Recreation, some or all of the following: swimming pool (excepting areas with long, cold winters), shuffleboard, horseshoe pitching, golf course, hobby shop, hobby classes, games, potlucks, dances or natural recreational facilities.
- 5N. All late model homes in excellent condition.
- 5O. At least 75% occupancy in order to judge quality of residents which indicates park's ability to maintain a five star rating between inspections.
- 5P. All empty lots grassed, graveled, or otherwise well maintained.
- 5Q. If pets or children allowed, there must be a place for them to run and play without cluttering the streets and yards.
- 5R. Superior on-duty management interested in comfort of residents and maintenance of park.

B.

PARK DEVELOPMENT AND OPERATION

Park Development
(PERT Chart)

100-SITE MOBILE HOME PARK
10 SITES PER ACRE



Source: The President's Committee on Urban Housing, A Decent Home, Volume II, U.S.G.P.O.: Washington, D.C., 1969, p. 23.

100-SITE MOBILE HOME PARK

C.

COST/PRICE ANALYSIS

1.
Site Development Costs

STATE	YRS BUILT	SPACES	DENSITY	\$/SPACE YR BUILT	\$/SPACE 1973	\$/SPACE 1973 DC
ARKANSAS	1973	17	6	\$1000	\$1000	\$1000
ARKANSAS	1963-73	180	N/A	\$1470-1562	\$2310	\$2237
ARIZONA	1971-72	300	5	\$ 666	\$ 703	\$ 640
CALIFORNIA	1973-74	176	9	\$1500-3488	\$2785	\$2590
CALIFORNIA	1959	68	11	\$2941	\$5779	\$5374
CALIFORNIA	1973	211	6	\$4265	\$4265	\$3966
GEORGIA	1971-72	300	8	\$3333-5000	\$4558	\$5435
GEORGIA	1959-62	79	4	\$ 400-1110	\$1375	\$1639
FLORIDA	1972	326	6	\$3374	\$3564	\$3809
FLORIDA	1965-68	85	9	\$ 833-1545	\$2161	\$2310
FLORIDA	1956-72	93	9	\$2098	\$2215	\$2367
FLORIDA	1956	53	16	\$1188	\$2557	\$2733
FLORIDA	1956-70	20	10	\$1400-6166	\$6602	\$7057
ILLINOIS	1960-74	120	7	\$1018-1766	\$2262	\$2146
ILLINOIS	1948	42	6	\$1142	\$3279	\$3083
INDIANA	1967-68	148	7	\$1517-1888	\$2651	\$2541
IOWA	1970-73	30	3	\$ 333-2545	\$1616	\$1616
KANSAS	1957-72	79	6	\$ 625-1666	\$1380	\$1510
MAINE	1957-67	22	4	\$ 500-835	\$1066	\$1152
MINNESOTA	1954-70	340	8	\$1956-2247	\$4581	\$4176
MISSOURI	1961-71	40	4	\$2428-3000	\$4000	\$3915
NEW YORK	1952-61	100	4	\$ 529-2741	\$2744	\$2551
NEW YORK	N/A	45	3	\$1500-2000	N/A	N/A
NEW YORK	1969-71	36	6	\$1333-1428	\$1725	\$1604
NEVADA	N/A	27	3	\$ 740	N/A	N/A
OKLAHOMA	1968-72	102	9	\$1052-5000	\$3783	\$4090
OKLAHOMA	N/A-72	101	10	\$1029	\$1086	\$1175
PENNSYLVANIA	N/A	26	N/A	\$1154	N/A	N/A
PENNSYLVANIA	1962-70	84	9	\$7916	\$9847	\$8639
SOUTH CAROLINA	1071-72	150	3	\$ 430-1666	\$1583	\$1937
VIRGINIA	1971-73	500	7	\$5600	\$5913	\$6873
TEXAS/LA	1973	110 avg	9	\$3100	\$3100	\$3203
WASHINGTON	1959-73	76	5	\$ 950-1300	\$1640	\$1605
WASHINGTON	1960-62	18	2	\$2625-3000	\$5360	\$5247
AVERAGE, ALL 34 PARKS					\$3220	\$3308
AVERAGE, ALL 69 INCREMENTS (PHASES OF EACH PARK)					\$3042	N/A

NUMBER OF PARKS BUILT ALL AT ONCE, 10 OF 34 (30%)

SOURCE: Responses to PMHI Park Operator/Owner Survey, 1973

SITE DEVELOPMENT COSTS (EXCLUDING LAND COSTS), 34 MOBILE HOME PARKS

2.

Total Costs

PARK	YR BUILT	COSTS PER SPACE, YEAR BUILT.....		
		LAND	DESIGN	CONSTRUCTION
1	1970	N/A	N/A	\$2530
2	1969	N/A	N/A	2801
3	1969	N/A	N/A	2939
4	1972	869	354	3091
5	1960	443	N/A	2278
6	1969	258	N/A	2400
7	1965	366	N/A	2583
8	1970	741	224	2500
9	1971	N/A	N/A	3605
10	1972	513	130	1614
11	1972	N/A	N/A	3730
12	1969	N/A	200	2208
13	1965	N/A	155	1261

SOURCE: MHMA Plans and Specs, Volumes 1 and 2, 1969, Herbert Behrend and Daryoush Ghorbani (Parks 1-3)
 Responses to PMHI Letter to Park Designers/Developers. 1973

COMPARATIVE TOTAL DEVELOPMENT COSTS INCLUDING LAND COSTS
13 COMMERCIAL MOBILE HOME PARKS
ORIGINAL COSTS, AS BUILT, 1960-1972

3.

Comparative Site Development Costs:
Parks vs. Conventional Housing Projects

ITEM	10 CONVENTIONAL HOUSING PROJECTS		13 COMMERCIAL MOBILE PARKS		7 MILITARY MOBILE PARKS	
COMMUNITY FACILITIES	\$ 0	0.0%	\$ 525	10.8%	\$ 0	0.0%
UNUSUAL COSTS	165	2.6%	100	2.0%	included below	
Utilities	165		50		"	"
Roads	0		50		"	"
SITE PREPARATION	430	6.8%	215	4.3%	410	10.5%
PAVING	1270	20.4%	1015	20.7%	670	17.2%
Curbs/Gutters	280		235		0	
Parking/Driveways	210		320		100	
Streets	515		405		475	
Walks	265		55		95	
UTILITIES	2385	38.0%	1820	37.2%	2255	57.9%
Water	505		410		430	
Sewer	515		580		590	
Gas	315		130		310	
Electrical	550		195		600	
Street Lights	120		90		95	
Storm Drainage (UG)	380		415		230	
LANDSCAPING	420	6.7%	165	3.4%	195	5.0%
Grass	275		100		80	
Trees/Shrubs	145		65		115	
FENCING	220	3.5%	105	2.1%	90	2.3%
UNIT ACCESSORIES	1380	22.0%	865	17.7%	275	7.1%
Pad, Foundation	960		330		incl above	
Storage Sheds	310		370		170	
Patio	110		165		105	
OTHER COSTS	0	0.0%	90	1.8%	0	0.0%
TOTAL SITE DEVELOPMENT						
w/community facilities	\$6270	100.0%	\$4900	100.0%	\$3895	100.0%
w/o community facilities	6270		4375		3895	
AVERAGE DENSITY:	5 UNITS/ACRE		6.5 UNITS/ACRE		6 UNITS/ACRE	
ESTIMATED 73 DC COST:	\$6116 PER UNIT		\$3445 PER SPACE		\$3470 PER SPACE	
ORIGINAL PRICES:	\$4734-6457 (1971)		\$1614-3730 (60-72)		\$2854-4106 (73)	
	A-E Estimates		Actual Bids		Current Estimates	

SOURCES: MHMA Plans and Specs, Volumes 1 and 2, 1969, Herbert Behrend and Daryoush Ghorbani (3 parks)

Responses to PMHI Letter to Park Designers/Developers, 1973 (17 parks and 10 conventional housing projects)

COMPARATIVE SITE DEVELOPMENT COSTS
WASHINGTON, DC, JUNE 1973

4.
Land Development Cost Checklist

LAND DEVELOPMENT COST CHECKLIST

	<u>Unit Price</u>	<u>Total Cost</u>
I. <u>Land (unimproved)</u>		
II. <u>Zoning and Fees</u>		
1. Planning Board		
2. Sewer Authority		
3. Township Agreement		
4. Subdivision Bonds	0.15% of Bond	
5. Maintenance Bonds	0.15% of Bond	
6. Street Acceptance & Dedication		
7. Permits		
8. Taxes - Transfer, real estate, etc.		
9. Engineering		
10. Settlement Charges		
a. Title Search & Insurance		
b. Transfer Taxes		
c. Conveyancing		
d. Federal Stamps		
e. Recording		
f. Notary		
g. Insurance		
(1) Fire & Extended		
(2) Contingent		
(3) O. L. & T.		
h. Legal Fees		
i. Real Estate Taxes		
III. <u>Design</u>		
1. Land Planning		
2. Environmental Impact Study		
3. Presentation Drawings		
4. Permits & Surveys		
5. Topography		
6. Stakes & Elevations		
7. Surveys		
8. Prints		
IV. <u>Construction</u>		
1. Community Facilities		
2. Unusual Costs		
a. Utilities		
b. Roads		
3. Site Preparation		
4. Paving		
a. Curbs/Gutters		
b. Parking/Driveways		
c. Streets		
d. Walks		
4. Utilities		
a. Water		
b. Sewer		

	<u>Unit Price</u>	<u>Total Cost</u>
c. Gas		
d. Electrical		
e. Street Lights		
f. Storm Drainage		
5. Landscaping		
a. Grass		
b. Trees/Shrubs		
6. Fencing		
7. Unit Accessories		
a. Pad Tie-Down Anchors		
b. Storage Sheds		
c. Patios		
8. Other Costs		

D.

PARK FINANCING

1.

Federal Housing Administration Statistics

Characteristics of Sec. 207 Mobile Home Park Transactions
1970 and 1971

Characteristics	Percentage distribution of projects or dwelling units	
	1971	1970
Projects size in spaces		
Average size.....	185.9	163.0
Median size.....	169.0	161.0
Average number of spaces per acre: (% of projects)		
3.0 to 3.4.....	7.0	2.8
3.5 to 3.9.....	2.3	1.1
4.0 to 4.4.....	2.3	3.1
4.5 to 4.9.....	7.0	4.5
5.0 to 5.4.....	9.3	6.8
5.5 to 5.9.....	14.0	2.5
6.0 to 6.4.....	18.6	15.4
6.5 to 6.9.....	7.0	13.0
7.0 to 7.4.....	14.0	20.8
7.5 to 7.9.....	13.9	11.1
8.0 to 8.9.....	2.3	9.7
9.0 or more.....	2.3	9.2
Median project ratio.....	6.2	7.0
Average mortgage amount per space: (% of spaces)		
Less than \$2,000.....	--	1.7
\$2,000 to 2,499.....	6.3	21.8
2,500 to 2,999.....	26.8	37.7
3,000 to 3,499.....	39.1	20.0
3,500 to 3,999.....	27.8	18.8
Mortgage amount:		
Average per space.....	\$3,111	\$2,880
Median per space.....	\$3,216	\$2,852

Characteristics	Percentage distribution of projects or dwelling units	
	1971	1970
Mortgage amount as proportion of replacement cost: (% of projects)		
Less than .800.....	9.3	14.1
.800 to .824.....	7.0	4.7
.825 to .849.....	2.3	8.2
.850 to .874.....	9.3	9.4
.875 to .899.....	20.9	20.1
.900.....	51.2	38.8
.901 to .924.....	--	3.5
.925 to .949.....	--	--
.950 to .974.....	--	--
.975 to .999.....	--	1.2
Median project proportion.....	.900	.893
Monthly rental per space: (% of spaces)		
Less than \$40.00.....	1.0	4.3
\$40.00 to 49.99.....	39.3	52.7
50.00 to 59.99.....	41.0	26.5
60.00 to 69.99.....	18.0	9.1
70.00 or more.....	.7	7.4
Median rent per space.....	\$52.36	\$48.66
Price of land as proportion of replacement cost: (% of projects)		
Less than .10.....	23.2	13.1
.10 to .14.....	27.9	27.4
.15 to .19.....	25.6	33.3
.20 to .24.....	16.3	13.1
.25 to .29.....	7.0	7.1
.30 to .34.....	--	1.2
.35 to .39.....	--	1.2
.40 to .44.....	--	1.2
.45 or more.....	--	2.4
Median project proportion.....	.148	.166

Characteristics	Percentage distribution of projects or dwelling units	
	1971	1970
Average price of land per space: /a (% of space)		
Less than \$250.....	16.7	7.2
\$250 to 499.....	28.2	37.1
500 to 749.....	29.5	33.1
750 to 999.....	18.2	7.8
1,000 to 1,249.....	6.3	11.8
1,250 to 1,499.....	1.1	1.8
1,500 or more.....	--	1.2
Median price.....	\$543	\$543

a/ Price of land does not include cost of development

Source: Compiled from 1972 HUD Statistical Yearbook, Dept. of Housing and Urban Development.

VOLUME OF FHA-INSURED SECTION 207 MORTGAGES,
BY STATE LOCATION OF PROJECTS, BY SECTIONS, 1935-1971

<u>States</u>	<u>Mobile home courts</u>
<u>Total</u>	<u>47,087</u>
Alabama	--
Alaska	388
Arizona	1,906
Arkansas	1,109
California	2,456
Colorado	543
Connecticut	--
Delaware	--
Washington D.C.	--
Florida	3,409
Georgia	715
Hawaii	--
Idaho	50
Illinois	296
Indiana	1,369
Iowa	283
Kansas	588
Kentucky	799
Louisiana	1,066
Maine	--
Maryland	323
Massachusetts	--
Michigan	3,856
Minnesota	2,010
Mississippi	622
Missouri	931
Montana	413
Nebraska	195
Nevada	602
New Hampshire	--
New Jersey	144
New Mexico	418
New York	66
North Carolina	--
North Dakota	50
Ohio	2,678
Oklahoma	5,045
Oregon	1,160
Pennsylvania	330
Rhode Island	--
South Carolina	1,339

<u>States</u>	<u>Mobile home courts</u>
Total	47,087
South Dakota	150
Tennessee	375
Texas	8,551
Utah	596
Vermont	--
Virginia	867
Washington	555
West Virginia	--
Wisconsin	618
Wyoming	216
Canal Zone	--
Guam	--
Puerto Rico	--
Virgin Islands	--

2.

Land Buying Check List

II-TRANSPORTATION

- A. Means of transportation to main metropolitan area?
 Bus _____ Street car _____ Main hghwy _____ R.R. _____
- B. Average travel time to metropolitan area?
 Bus _____ Street car _____ Motor _____ R.R. _____
- C. Average travel time to main payroll area?
 Bus _____ Street car _____ R.R. _____ Motor _____
- D. Is free transportation provided to
 Grammar school _____ Junior high _____ High _____
- E. Cost of transportation
 Main metropolitan area \$ _____ Main payroll area \$ _____
- F. Are any freeways proposed near property?
 Yes _____ No _____

III-RESTRICTIONS & ZONING

- A. If available, get the following:
 1. Copy of restrictions covering land usage of proposed property, if any. If not restricted, check _____
 2. Copy of zoning regulations.
- B. Is there any indication of infiltration of inharmonious racial groups? Yes _____ No _____
- C. Under existing zoning regulations, what land usage is permitted on adjoining properties?
 North _____ South _____
 East _____ West _____
- D. Is any part of property available under zoning restrictions for use as business, commercial, or industrial? If so, describe what usage and where permitted. _____

IV-UTILITIES

- A. Water
1. Is domestic water available at property?
 Yes _____ No _____
 2. If No, how far? _____
 3. Supplied by Public utility? _____
 Mutual water company? _____
 4. Quality of water _____
 5. Water rates _____
 6. Size of supply main _____

IV-UTILITIES - Continued

B. Gas

1. Is gas available at property? Yes _____ No _____
2. If No, how far? _____
3. Is it supplied by Public utility? _____
4. Rates _____
5. Size of supply _____

C. Electricity

1. Is electricity available at property?
Yes _____ No _____
2. If No, how far? _____
3. Is it supplied by Public utility? _____
4. Rates _____

D. Telephone

1. Is telephone service available at property?
Yes _____ No _____
2. If No, how far? _____

E. Sewerage

1. What method of sewage disposal?
 - (a) Public sewers? Yes _____ No _____
 - (b) If No, how far? _____
 - (c) Will domestic sewage flow to main trunk or will it have to be pumped? _____
 - (d) Cesspools? _____
 - (e) Septic tanks? _____

V-PHYSICAL CHARACTERISTICS

- A. Type of top soil. Adobe _____ Clay _____ Loam _____
Sand _____ Rock _____ Any Other _____
- B. Type of sub-soil _____
- C. Depth to underground water table _____
- D. Is the land generally flat? _____
- E. Low? _____
- F. Gently rolling? _____
- G. Hilly? _____
- H. Wooded? _____
- I. Will the land require special drainage features? _____
- J. Is the land traversed by any drainage ditches carrying water regularly or at flood peaks? _____
- K. Does the land show evidence of continued erosion? _____
- L. Are there any permanent easements or rights of way through the property? Yes _____ No _____
If Yes describe _____
If so, mark on map.
- M. Size of building parcels or lots adjacent to property.
North _____ South _____
East _____ West _____

VI-TAXES & SPECIAL ASSESSMENTS

- A. What is the assessed valuation of property? \$ _____
- B. What is the tax rate of property? \$ _____
- C. What is the average tax rate of adjoining community? _____
- D. If property is inside the city limits, break down the tax rate showing rate for the city and rate for county.
City _____ County _____
- E. 1. Are there any special assessments now against the property caused by recent major improvements? Yes _____ No _____
2. If so, describe _____
- F. 1. For what period will such assessments run? _____
2. What is the % of the special assessment against the total assessed valuation of the property? _____

VII-SPECIAL AMENITIES

Are there any special attractions at or near the property? If so, please describe as follows:

1. Special views? _____
2. Large trees? _____
3. Rivers, lakes, ocean, etc. _____
4. Swimming facilities? _____
5. Freedom from (a) Fog _____ (b) Ind. smoke _____
(c) Frost _____
6. Average yearly
Rainfall _____ Temperature _____ Rel. humidity _____
7. Air Movement
(a) Cool winds from mountains or ocean? _____
(b) Warm winds from deserts, etc. _____
8. Direction of prevailing winds _____

VIII-IMPROVEMENTS

In any proposed subdivision much will depend upon the regulations of the local governing body.

- A. What is average cost of subdivision improvements per acre as required in the community? _____
- B. What are the prevailing costs of the following improvement work:
Excavation, per cu. yd. _____
Standard cement curb, per lin. ft. _____
Standard gutters, per sq. ft. _____
Monolithic curb and gutters, per lin. ft. _____
Side walk, per sq. ft. _____
Cross gutters, per sq. ft. _____

VIII-IMPROVEMENTS - Continued

- C. Street pavement:
1. What type is required? _____
 2. What is cost per sq. ft.? _____
 3. Will special type of sub-base be required under pavement?
Yes _____ No _____
 4. If Yes, what is required? _____
 5. What cost per sq. ft.? _____
- D.
1. Average cost of sewer lines including manholes, per lin. ft.? _____
 2. Cost of sewer house connections, per lin. ft.? _____
- E. Water Main:
1. Size and cost of water main required _____
 2. Will the water company install water mains at their expense?

 - Or must water mains be installed at subdivider's expense?

 3. If at the subdivider's expense, what are the terms of refund arrangement, if any? _____
 4. Cost of each house water meter connection, if any?

- F. Gas:
1. Will the gas company install gas mains at their expense?

 - At the subdivider's expense? _____
 2. If at the subdivider's expense, what are the terms of refund arrangement per connection, if any? _____
- G. Electricity:
1. Will the electric company install domestic lines at their expense? _____ At subdivider's exp.? _____
 2. If at the subdivider's expense, what are the terms of refund arrangement per connection, if any? _____
- H. What is the cost of a complete site survey and engineering calculation of record maps, survey stakes, street plans and profiles, etc.? _____
- I.
1. What width of streets will the governing body require for pavement from curb to curb on single family residential streets?

 2. What width of right of way do they require from property line to property line? _____
- J. Lot Sizes:
1. What will the governing body require for minimum lot sizes for single family residences? _____ sq. ft.
 2. What is minimum width of lot permitted for single family residence? _____

VIII-IMPROVEMENTS - Continued

K. Are subdivision improvements usually installed by subdivider with cash? _____

Or, are subdivision improvements by local assessment district and financed by governing body? _____

IX-COST OF LAND

What price per acre to obtain subject property? _____

X-OTHER

A. Besides maps, etc., get following, if available:

1. Regional major highway plan.
2. Record of traffic counts taken on boulevards adjacent to subject property.
3. Copy of laws and ordinances which govern subdivision of land.

B. FHA

1. Has FHA issued a subdivision report on the property?

Yes _____ No _____

2. Will the subject property qualify for FHA loans?

Yes _____ No _____

E.

MAJOR DATA BASES:
THE PMHI PARK OPERATOR/OWNER SURVEY
(PMHI/PS)

1.
The Survey

The Park Survey questionnaire prepared by Project Mobile Home Industry was designed to be as comprehensive as possible, given the constraint that a request for too much information and detail would likely yield an unduly low response rate.

At the outset, it was feared that the twelve-page length of the PMHI/PS questionnaire might be excessive. However, when the questionnaire was field-tested by industry, the length was not viewed as a problem, and the original length was maintained. Confirmation of this decision occurred when the response rate to the Park Survey turned out to be approximately the same as for the other surveys.

The Park Survey was divided into six general areas: (1) Park Owner/Manager, (2) Park Development, (3) Finance, (4) The Park and Its Residents, (5) The Park and Its Design, and (6) Conclusions. Information from previous years and estimates for future years was requested so that trends could be identified. After questions were developed, a preliminary draft was prepared and submitted to HUD. With the feedback from that agency, the OMB, and the Bureau of the Census, revisions were made. Finally, the resulting questionnaire was field-tested by industry before being used for the survey.

The Park Operator/Owner Survey package was mailed to 1,316 parks (Code numbers 01001-011316). The mailing list was based on a computer printout provided by Woodall's which gave the addresses of approximately 13,200 rated parks. The list did not include any parks not rated by

Woodall's. After detailed negotiations with Woodall's, it was found that a manual search through non-computerized, loosely organized files of addresses would have been necessary for compiling an address list of non-rated parks, an effort which would have been cost-prohibitive. A random sample of 10% of the total number of rated parks in each state was taken.

The 1,316 survey packages were mailed on July 12 and 13, and October 19, 1973 was set as a cut-off date for returns. When calculating a rate of return, all returned surveys marked "out of business," or "wrong address" (and returned unopened with no forwarding address) were subtracted from the total number mailed. This number, 1,289, represents all mobile home parks which received a survey package. One hundred fifty-one responded, which yields an 11.5% rate of return. Out of those, one hundred thirty-two responses were codeable for computer analysis.

To test the representativeness of our initial sample, a follow-up survey was prepared and mailed on October 23 with a cut-off date for returns of January 9, 1974. Ten percent of the non-respondents of the first survey were sent a condensed four-page parks questionnaire. Of these, 118 were received by the companies and 10 were completed by respondents yielding a response rate of 8.4%

To guarantee that all information would remain confidential, a security system was implemented. Each entry on the mailing list of parks was given

a code number which matched the number stamped on its otherwise unmarked questionnaire. This was done to insure anonymity once PMHI finished its analysis. To insure confidentiality during the time that the surveys were being analyzed at PMHI, they were stored in a locked cabinet accessible only to authorized personnel.

Copies of both the park survey as well as the follow-up survey questionnaires appear after the next chapter.

2.

Statistical Testing
of Representativeness

The statistical universe to which PMHI's respondent sample was compared was the 13,059 parks rated by Woodall's. The follow-up sample of 10 was not used because 10 was judged too small a sample size to be meaningful.

The standard procedure for testing involved two steps: (1) compiling a list of common denominators between the information available for the universe and the information generated by PMHI/PS, and (2) then selecting for testing all variables which were both of basic importance and for which there were a sufficient number of responses in the PMHI/PS sample. The three variables which fit these criteria and which were used as base line information for comparison were: (1) Woodall's star ratings, which measured quality; (2) average number of spaces per park, nationally, an overall measure of average size; and (3) regionality, the proportion of parks in various regions. These tests are discussed individually below.

Woodall's Star Ratings

Since the PMHI sample necessarily included only rated parks, representativeness as defined here means representative for the universe of rated parks. The test for ratings was run with 91 parks. Of the 132 parks in our coded sample, 13 were new and under construction. For the remainder of the parks, due to a number of technical and statistical difficulties, PMHI was unable to reliably ascertain

their ratings in 1973. Summary statistics for ratings distribution in the universe were provided by Woodall's.

The following chart compares the number of parks that actually fell into each of the five rating categories to the number expected from the Woodall's universe, i.e., expected if the same proportions occurred in our sample as in the Woodall's statistical universe of 13,059 parks.

Rating Category		1	2	3	4	5	Total
PMHI/PS	No.	23	35	23	8	2	91
	%	25.27	38.46	25.27	8.79	2.20	99.99
Woodall's Universe	No.	26.46	33.03	22.45	7.02	2.04	91
	%	29.08	36.03	24.67	7.71	2.24	100

One can see from naive inspection that the PMHI/PS distribution closely resembles that of the Woodall's universe. The Chi-squared test of representativeness confirms intuition and demonstrates that our sample is significantly unbiased to the $p = .0514$ level where $\chi^2 = .721$ for 4 degrees of freedom. Thus, in terms of star ratings, that is, quality as judged by Woodall's, our sample is highly representative.

Spaces per Park

Woodall's also made available spaces-per-park statistics. Using this data, we compared PMHI/PS's nationwide average of number of spaces per park to the nationwide average of the Woodall's universe.

	Total Spaces	No. Parks (Excluding New or Under Construction)	Spaces/PU
PMHI/PS	9,296	91	102.15
Woodall's universe	1,252,519	13,059	95.91

In order to test whether the PMHI result was biased, a t-test was performed. The result of the t-test is that with a difference of means of 6.2, and a standard error of 0.498, $p = 0.383$. Since p is less than 0.5, the PMHI sample is indicated to be more on the unbiased than the biased side. Since a $p < .05$ level of either bias or lack of bias does not occur, no firm conclusion can be drawn. However, the above test favors the hypothesis of representativeness over unrepresentativeness.

Regionality

The chart below compares PMHI/PS regional distribution to that of the universe.

	N.E.	S.	N. Central	W.
Real, PMHI	9	46	37	37
Expected from Woodall	10.54	41.67	32.30	44.49

The Chi-squared test, which judges how well the real distribution fits the expected, results in $\chi^2 = 2.62$ with 3 degrees of freedom and p is between .5 and .6. That is, the hypothesis of bias (unrepresentativeness) is slightly favored, although it is far below being proven biased to a significant level, which would require $p \leq .05$.

Conclusion

Although regionality is very slightly biased, size of parks was shown to be fairly unbiased and quality mix of parks is very representative. In summary, an overall consideration of the three items tested here provides strong support for the representativeness of our PMHI/PS sample.

3.

Copy of the PMHI/PS Questionnaire

QUESTIONNAIRE

PROTECTION OF CONFIDENTIAL INFORMATION

TO ENSURE THAT PROPRIETARY INFORMATION IS HANDLED IN STRICTEST CONFIDENCE, THE QUESTIONNAIRE HAS BEEN GIVEN A CONTROL NUMBER. THIS AND ADDITIONAL PROTECTIVE MECHANISMS THAT ARE BEING ESTABLISHED ASSURE THAT IT WILL NOT BE POSSIBLE TO ASSOCIATE ANY RESPONSE WITH A SPECIFIC COMPANY.

Note

For annual data, please use calendar year or, where necessary, the 12-month period most closely corresponding to the calendar year. Please indicate below which 12-month period you will be using if you are not using calendar year figures. 12-Month period used: _____.

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OMB No. 63-S73021
Approval expires August, 1973I. PARK OWNER/MANAGER

1. In what state is your park located? _____
2. Are you the: (Check one or more)
 - a. park manager?
 - b. owner?
 - c. developer?
3. What is the legal form of organization under which this park is owned? (Check one)
 - a. individual proprietor
 - b. partnership
 - c. corporation
4. a. If you manage this park, have you managed other parks? a. 1. Yes ; 2. No .
If Yes:
 - b. How many? b. _____
 - c. How many years have you managed parks? c. _____ years
 - d. How large were the parks? d. _____ units per
 - e. Were they adult or family parks? (Check one or more) avg. park
 1. young adults
 2. older and retired adults
 3. family
5. a. What type of work did you do before you became involved with this park? _____
b. Did you have school training in park management?
 1. Yes
 2. No
 3. No, but had practical experience
6. a. If you are only the manager, do you receive income and benefits? a. 1. Yes ; 2. No .
b. If Yes, what type of fringe benefits? _____
7. Excluding yourself, how many people do you employ?
 - a. full-time a. _____
 - b. part-time b. _____
8. Did you become involved in parks as an outgrowth from any of the following areas? (Check one or more)
 - a. mobile home dealer
 - b. mobile home manufacturing
 - c. trailer-recreational vehicle park development or operation
 - d. building manufacturing
 - e. land development other than mobile home or trailer parks
 - f. on-site residential construction
 - g. other (Please specify): _____
 - h. No, went straight in mobile home park operation

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9. Is the owner of the park now in or planning to expand into any of the following activities by 1974? (Check one or more)

	<u>Presently In</u>	<u>By 1974</u>
a. mobile home manufacturing	a. <input type="checkbox"/>	<input type="checkbox"/>
b. mobile home dealerships	b. <input type="checkbox"/>	<input type="checkbox"/>
c. cooperatives of mobile homes	c. <input type="checkbox"/>	<input type="checkbox"/>
d. condominiums of mobile homes	d. <input type="checkbox"/>	<input type="checkbox"/>
e. mobile home subdivisions	e. <input type="checkbox"/>	<input type="checkbox"/>
f. trailer-recreational park development	f. <input type="checkbox"/>	<input type="checkbox"/>
g. mobile home consumer financing	g. <input type="checkbox"/>	<input type="checkbox"/>
h. on-site residential construction	h. <input type="checkbox"/>	<input type="checkbox"/>
i. on-site non-residential construction	i. <input type="checkbox"/>	<input type="checkbox"/>
j. production of building supplies	j. <input type="checkbox"/>	<input type="checkbox"/>
k. distribution of building supplies	k. <input type="checkbox"/>	<input type="checkbox"/>
l. don't know	l. <input type="checkbox"/>	<input type="checkbox"/>
m. other (Please specify): _____	m. <input type="checkbox"/>	<input type="checkbox"/>

10. a. Does the owner own other mobile home parks? a. 1. Yes ; 2. No .
 If Yes:
 b. How many parks? b. _____
 c. What is their total space capacity? c. _____ no. spaces
 d. In what states are these parks located? c. _____
 e. Compare these other parks with this park as to the type of people who reside in them. (Check one or more)

	<u>The Other Parks</u>	<u>This Park</u>
1. young adults	1. <input type="checkbox"/>	<input type="checkbox"/>
2. older and retired adults	2. <input type="checkbox"/>	<input type="checkbox"/>
3. families	3. <input type="checkbox"/>	<input type="checkbox"/>

II. PARK DEVELOPMENT

If you know about the initial development of the park, please answer questions nos. 11-20. Otherwise, please proceed to Section III, FINANCE.

11. In what year was this park developed? _____.

12. What factors most influenced the choice of this site? (Check one or more)
- | | |
|---|-----------------------------|
| a. favorable location (to shopping, employment, transportation) | a. <input type="checkbox"/> |
| b. low land costs for the area | b. <input type="checkbox"/> |
| c. favorable zoning | c. <input type="checkbox"/> |
| d. low utility costs (off-site) | d. <input type="checkbox"/> |
| e. low construction costs | e. <input type="checkbox"/> |
| f. high demand for spaces in this area | f. <input type="checkbox"/> |
| g. attractive natural features | g. <input type="checkbox"/> |
| h. attractive surroundings | h. <input type="checkbox"/> |
| i. other (Please specify): _____ | i. <input type="checkbox"/> |

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13. What was the zoning status of the land before park development? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| a. single family residential | a. <input type="checkbox"/> |
| b. multifamily residential | b. <input type="checkbox"/> |
| c. commercial | c. <input type="checkbox"/> |
| d. industrial | d. <input type="checkbox"/> |
| e. mobile home parks | e. <input type="checkbox"/> |
| f. other (Please specify): _____ | f. <input type="checkbox"/> |
14. If parks were not allowed on the land, what appeal procedure was followed? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| a. variance | a. <input type="checkbox"/> |
| b. special permit | b. <input type="checkbox"/> |
| c. amendment of zoning ordinance | c. <input type="checkbox"/> |
| d. other (Please specify): _____ | d. <input type="checkbox"/> |
15. If involvement in several appeals was made, to what bodies were these appeals made? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| a. building inspector | a. <input type="checkbox"/> |
| b. zoning board of appeals | b. <input type="checkbox"/> |
| c. municipal court | c. <input type="checkbox"/> |
| d. superior court | d. <input type="checkbox"/> |
| e. appellate court | e. <input type="checkbox"/> |
| f. other (Please specify): _____ | f. <input type="checkbox"/> |
16. a. How long did it take to get the project approved by? (Specify one or more)
- | | |
|----------------------------------|-----------------|
| 1. financing sources | 1. _____ months |
| 2. building inspector | 2. _____ |
| 3. zoning officials | 3. _____ |
| 4. other planning officials | 4. _____ |
| 5. municipal court | 5. _____ |
| 6. superior court | 6. _____ |
| 7. appellate court | 7. _____ |
| 8. other (Please specify): _____ | 8. _____ |
- b. What was the total project approval time? b. _____ months
17. a. Did the bodies which approved the park make any requirements regarding the park by way of design, sewage, roads, etc.? a. 1. Yes ; 2. No .
- b. If Yes, please specify what requirements? _____
-
18. What do you estimate your total costs were to obtain the desired zoning for the development of this park? \$ _____
19. a. If this park was built in phases, how many spaces were built in each phase?
- | | |
|--------------------------------------|----------------------|
| 1. phase one: _____ no. of spaces; | _____ date completed |
| 2. phase two: _____ no. of spaces; | _____ date completed |
| 3. phase three: _____ no. of spaces; | _____ date completed |
- b. If future expansion is planned, how many spaces are estimated to be added to this park by 1974? b. _____ spaces

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III. FINANCE

Questions which you may not feel knowledgeable about answering may be omitted.
Please indicate DON'T KNOW for these responses.

20. a. If you were not the developer, what was the purchase price of your park?
a. \$ _____ in 19__
b. \$ _____
- b. What was the cash downpayment?
b. \$ _____
- c. How was the remainder financed:
- | | | |
|---------------------------------------|----------------------|---------------------------|
| 1. bank (conventional first mortgage) | 1. \$ _____ @ _____% | interest over _____ years |
| 2. second mortgage | 2. \$ _____ @ _____% | interest over _____ years |
| 3. FHA insured | 3. \$ _____ @ _____% | interest over _____ years |
| 4. Small Business Administration | 4. \$ _____ @ _____% | interest over _____ years |
| 5. financing by the previous owner | 5. \$ _____ @ _____% | interest over _____ years |
| 6. other (Please specify): _____ | 6. \$ _____ @ _____% | interest over _____ years |
- d. What is the monthly payment for principal and interest? d. \$ _____

21. a. If you developed this park from scratch, how much did it cost? (Please specify for each phase of development).

- | | |
|--------------|-------------|
| 1. Phase I | 1. \$ _____ |
| 2. Phase II | 2. \$ _____ |
| 3. Phase III | 3. \$ _____ |

(If more than three phases, please continue on a separate sheet.)

TOTAL DEVELOPMENT COSTS (include land, design, construction, administration, overhead)

- b. How was the financing done?
- | | | |
|----------------------------------|----------------------|---------------------------|
| 1. bank (conventional) | 1. \$ _____ @ _____% | interest over _____ years |
| 2. FHA insured | 2. \$ _____ @ _____% | interest over _____ years |
| 3. Small Business Administration | 3. \$ _____ @ _____% | interest over _____ years |
| 4. other (Please specify): _____ | 4. \$ _____ @ _____% | interest over _____ years |
- c. What is the monthly payment for principal and interest? c. \$ _____

22. a. Are you satisfied with you ability to obtain working capital financing?

a. 1. Yes ; 2. No

b. If No, please explain: _____

- c. What has been your average annual rate of return on equity since the purchase or development of the park? c. _____%

23. a. Are you also a mobile home dealer? a. 1. Yes ; 2. No

If yes,

- b. How many mobile homes do you sell each year? (average) b. _____ units

- c. How do sales vary accordingly to season?

1. How many units do you sell per month during peak season? 1. _____ units

2. How many units do you sell per month during slow season? 2. _____ units

- d. How many of your present park residents bought their mobile homes from you? d. _____%

- e. What is the average price of your averaged sized homes?

1. new 1. \$ _____: size _____ft. x _____ft.

2. used 2. \$ _____: size _____ft. x _____ft.

24. In 1972, what percentage of total annual park and park related revenue came from the following sources?
- | | |
|---|-----------|
| a. park rentals | a. _____% |
| b. lot sales | b. _____% |
| c. mobile home sales | c. _____% |
| d. mobile home rentals | d. _____% |
| e. utilities | e. _____% |
| f. service fees | f. _____% |
| g. concessions | g. _____% |
| h. overnight stay/recreational vehicles | h. _____% |
| i. other (Please specify): _____ | i. _____% |
| | 100 % |

25. WOULD YOU PLEASE SUBMIT YOUR MOST RECENT BALANCE SHEET AND INCOME STATEMENT. BUT PLEASE OMIT OR BLOT OUT NAMES AND ADDRESSES TO GUARANTEE ANONYMITY.

IV. THE PARK AND ITS RESIDENTS

26. How is the taxing of mobile homes treated in your state? (Check one)
- | | |
|----------------------------------|-----------------------------|
| a. personal property | a. <input type="checkbox"/> |
| b. real estate | b. <input type="checkbox"/> |
| c. vehicle | c. <input type="checkbox"/> |
| d. other (Please specify): _____ | d. <input type="checkbox"/> |
27. a. Are there other parks within a 10-mile radius? a. 1. Yes ; 2. No
- b. If Yes, are they the same type as yours with regard to adult or family orientation? b. 1. Yes ; 2. No
- c. If No, why do you think this is so? _____
- d. If No, what advantages do you think this gives your park? _____
28. a. How many total mobile home spaces does your park have? (Exclude spaces for short-time travel trailers, if any). a. _____ spaces
- b. How many of these spaces are usually vacant in your park? b. _____ spaces
- c. Over the years, what do you estimate your mobile home space vacancy rates have been?
- | | |
|--|-----------|
| 1. for 1972 (vacant spaces as % of total spaces) | 1. _____% |
| 2. for 1967 (if applicable) (vacant spaces as % of total spaces) | 2. _____% |
| 3. for 1963 (if applicable) (vacant spaces as % of total spaces) | 3. _____% |
- d. How do you fill vacancies? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| 1. newspaper ads | 1. <input type="checkbox"/> |
| 2. radio ads | 2. <input type="checkbox"/> |
| 3. television ads | 3. <input type="checkbox"/> |
| 4. signs in stores | 4. <input type="checkbox"/> |
| 5. highway signs | 5. <input type="checkbox"/> |
| 6. word of mouth | 6. <input type="checkbox"/> |
| 7. other (Please specify): _____ | 7. <input type="checkbox"/> |

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29. In the choice of tenants for your park, which of the following would you include as potential occupants? (Check one or more)
- | | |
|--------------------------------------|-----------------------------|
| a. Young couples | a. <input type="checkbox"/> |
| b. older and retired persons | b. <input type="checkbox"/> |
| c. single men | c. <input type="checkbox"/> |
| d. single women | d. <input type="checkbox"/> |
| e. divorcees | e. <input type="checkbox"/> |
| f. widowed persons | f. <input type="checkbox"/> |
| g. students | g. <input type="checkbox"/> |
| h. married couples with children | h. <input type="checkbox"/> |
| i. persons with pets | i. <input type="checkbox"/> |
| j. any others (Please specify) _____ | j. <input type="checkbox"/> |
-
30. a. Do you have a waiting list for prospective tenants? a. 1. Yes ; 2. No
 If Yes:
 b. How many names? b. _____
 c. How many spaces could you fill in 6 months, if you had them? c. _____
 d. How long do most people wait to move in? d. _____ months
31. a. Is there an entrance fee? a. 1. Yes ; 2. No
 b. If Yes, would you indicate you much it is? b. \$ _____
32. a. Is there a lease, covenant, or other written agreement for residency? a. 1. Yes ; 2. No
 b. If Yes, please specify the kind of agreement. _____
 c. If Yes, how long does the agreement run? c. _____ years
 d. If No, why did the owner/manager feel that one was not needed? _____
33. a. Is there a security deposit required of new residents? a. 1. Yes ; 2. No
 b. If Yes, how much is it? b. \$ _____
 c. If Yes, what is the regulation regarding return of the deposit? _____
-
34. a. Do any of the park occupants own the land on which their unit is sited? a. 1. Yes ; 2. No
 b. If Yes, what percentage? b. _____ % of park residents
 c. If Yes, what form of ownership is it? (Check one)
 1. cooperative 1.
 2. condominium 2.
 3. subdivision 3.
35. a. From what states do most of your residents come? _____
 b. If from the same state as this park, are new residents from the nearby vicinity? b. 1. Yes ; 2. No
36. How are the major portions of the residents of your park employed? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| a. skilled workers and foremen | a. <input type="checkbox"/> |
| b. unskilled workers | b. <input type="checkbox"/> |
| c. clerical | c. <input type="checkbox"/> |
| d. managers | d. <input type="checkbox"/> |
| e. professionals | e. <input type="checkbox"/> |
| f. unemployed, but not retired | f. <input type="checkbox"/> |
| g. retired | g. <input type="checkbox"/> |
| h. students | h. <input type="checkbox"/> |
| i. armed forces personnel | i. <input type="checkbox"/> |
| j. others (Please specify) _____ | j. <input type="checkbox"/> |

37. Which of the following groups now live or have lived, in your park? (Check one or more)

- a. white a.
- b. spanish american b.
- c. american indian c.
- d. negro/black d.
- e. oriental e.
- f. other (specify) _____ f.

38. a. Does your park have the following facilities? Do the residents use them or use those in the neighboring community? (Check one or more)

	<u>park has</u>	<u>use park's</u>	<u>use in community</u>
1. everyday shopping	1. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. other shopping	2. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. religious services	3. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. recreational building	4. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. sports facilities	5. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. other (Please specify) _____	6. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b. Describe the type of recreational and communal activities which your park has available. Is expansion or start-up planned for any? (If necessary, please continue on a separate sheet of paper.)

<u>Type of Present Activity</u>	<u>Type of activity You Plan to Begin (or Expand)</u>
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

c. Do your residents help in making decisions about:

- 1. park activities 1. a. Yes ; b. No
- 2. new community facilities 2. a. Yes ; b. No
- 3. changing and expanding park sites, etc. 3. a. Yes ; b. No

d. If No, for any of the above, what do you feel are the reasons for this? _____

39. How long do most residents live in your park? _____ years/average

40. How often are mobile homes in your park repossessed? _____ number of units/year

41. a. Do you purchase mobile homes of occupants who wish to move? (Check one)

- 1. most of the time 1.
- 2. from time to time 2.
- 3. rarely 3.
- 4. never 4.

b. Is a resale fee charged by the park owner to those residents wishing to move? b. 1. Yes ; 2. No

42. What percentage of the people who move sell their homes and what percentage take them with them?
- | | |
|--|-----------|
| a. sell to new tenant | a. _____% |
| b. sell to you (owner or manager) | b. _____% |
| c. sell to a dealer with no ownership interest in the park | c. _____% |
| d. move home | d. _____% |
43. How long does it usually take an occupant to sell a used mobile home that is located in your park? _____ weeks/average
44. a. Does the sales price of these used mobile homes seem higher or lower or about the same, as the price shown in the Official Blue Book for the same model and year? (Check one)
- | | |
|-------------------|-----------------------------|
| 1. usually higher | 1. <input type="checkbox"/> |
| Why? _____ | |
| 2. usually lower | 2. <input type="checkbox"/> |
| Why? _____ | |
| 3. about the same | 3. <input type="checkbox"/> |
- b. Do you feel your park increases the value of the used homes above the Blue Book price? b. 1. Yes ; 2. No
- c. If Yes, by how much? c. _____%
45. How old are the units in your park?
- | | |
|--------------------|--------------------|
| a. 2 years or less | a. _____% of total |
| b. 3 - 10 years | b. _____% of total |
| c. 11 - 20 years | c. _____% of total |
| d. 20 - 25 years | d. _____% of total |
| e. over 25 years | e. _____% of total |
46. a. Do you restrict the entrance of new tenants to those owning new units (except those buying homes from existing tenants in parks)? a. 1. Yes ; 2. No
- b. If Yes, why is that? _____
47. What usually happens to homes which leave the park? (Check one or more)
- | | |
|---|-----------------------------|
| a. move to another park of comparable quality | a. <input type="checkbox"/> |
| b. move to another less desirable park | b. <input type="checkbox"/> |
| c. move to rural location on individual lot | c. <input type="checkbox"/> |
| d. used for second homes/vacation areas | d. <input type="checkbox"/> |
| e. used as hunting lodges | e. <input type="checkbox"/> |
| f. used as sheds | f. <input type="checkbox"/> |
| g. used as construction offices | g. <input type="checkbox"/> |
| h. refurbished or sold in a used market | h. <input type="checkbox"/> |
| i. used for scrap metal | i. <input type="checkbox"/> |
| j. abandoned somewhere | j. <input type="checkbox"/> |
| k. do not know | k. <input type="checkbox"/> |
| l. other (Please specify): _____ | l. <input type="checkbox"/> |

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V. THE PARK AND ITS DESIGN

48. a. How many gross acres does your park consist of? a. _____ acres
- b. How many units are now located in your park?
1. singlewides 1. _____ units
2. expandables 2. _____ units
3. double or triplewides 3. _____ units
- c. What is the maximum size of the mobile homes you can accommodate? c. _____ ft. x _____ ft.
- d. What are the different lot sizes?
1. smallest lots 1. _____ ft. x _____ ft.
2. average lots 2. _____ ft. x _____ ft.
3. largest lots 3. _____ ft. x _____ ft.
- e. For how many cars is parking available? (Please specify one or more)
- | | | |
|-----------------------|---------------------------|---------------------|
| | <u>for residents only</u> | <u>for visitors</u> |
| 1. off-street parking | _____ cars/space | _____ cars/space |
| 2. on-street parking | _____ cars/space | _____ cars/space |
- f. If you have facilities and spaces for short-time travel trailers, for how many such units do you have spaces? _____ spaces

49. a. How much are 1973 lot rentals and prices (if applicable)?

	Lot Rentals	Lot Prices (lots for sale)
1. lowest	\$ _____ per month	\$ _____
2. average	\$ _____ per month	\$ _____
3. highest	\$ _____ per month	\$ _____

- b. What is included/not included in this price or rent? (Check one or more)

	Included in Charges			Not Included
	Sale	Rent		
1. initial hookup of home to utilities	1. <input type="checkbox"/>	<input type="checkbox"/>	1. \$ _____	
2. water	2. <input type="checkbox"/>	<input type="checkbox"/>	2. \$ _____	per year
3. gas (central system)	3. <input type="checkbox"/>	<input type="checkbox"/>	3. \$ _____	per month
4. sewer (central system)	4. <input type="checkbox"/>	<input type="checkbox"/>	4. \$ _____	per month
5. electricity	5. <input type="checkbox"/>	<input type="checkbox"/>	5. \$ _____	per month
6. garbage pickup	6. <input type="checkbox"/>	<input type="checkbox"/>	6. \$ _____	per month
7. taxes (Identify)	7. <input type="checkbox"/>	<input type="checkbox"/>	7. \$ _____	per month
8. park maintenance (community facilities)	8. <input type="checkbox"/>	<input type="checkbox"/>	8. \$ _____	per year
9. maintenance of individual lots (private areas)	9. <input type="checkbox"/>	<input type="checkbox"/>	9. \$ _____	per year
10. mobile home unit	10. <input type="checkbox"/>	<input type="checkbox"/>	10. \$ _____	
11. mobile home supports (type: _____)	11. <input type="checkbox"/>	<input type="checkbox"/>	11. \$ _____	
12. mobile home skirts (type: _____)	12. <input type="checkbox"/>	<input type="checkbox"/>	12. \$ _____	
13. other accessories (Please specify) _____	13. <input type="checkbox"/>	<input type="checkbox"/>	13. \$ _____	
14. other items (Please specify) _____	14. <input type="checkbox"/>	<input type="checkbox"/>	14. \$ _____	

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50. Can you name firms that have designed or developed mobile home parks since 1960?

Park/Location	Firm Name	Address
a.		
b.		
c.		
d.		
etc.		

51. DRAWINGS AND DESIGN COST ESTIMATES ARE NEEDED FOR US TO DO A MORE DETAILED STUDY OF YOUR PARK. WOULD YOU PLEASE SEND THE FOLLOWING ITEMS? M.I.T. WILL RETURN THEM TO YOU. PLEASE REMOVE ANY REFERENCES TO THE NAME OF THE PARK OR THE DESIGN FIRM OR DEVELOPER SO THAT ANONYMITY IS GUARANTEED. ALTHOUGH WE PLAN TO GRAPHICALLY COMPARE DESIGN AND COSTS IN THE REPORT, WE ASSURE YOU THAT IT WILL NOT BE POSSIBLE FOR REPORT READERS TO ASSOCIATE ANY RESPONSE WITH A SPECIFIC PARK OR FIRM. WE ASK YOU TO IDENTIFY THE BID DATE AND CITY NEAREST THE PARK ONLY TO MAKE THE COST STUDY MEANINGFUL. WE GUARANTEE THAT WE WILL DESTROY ANY RECORDS REGARDING THE NAME OF THE CITY AS SOON AS WE HAVE DETERMINED THE APPROPRIATE GEOGRAPHIC CONSTRUCTION COST INDEX.

- a. Site Plan(s): (approx. 1-5 shts, scale 1"-100') showing lot lines, mobile home pads, streets, driveways, walks, utility mains, community facilities, topograohy, landscaping.
- b. Typical Pad Layout: (approx. scale 1"-20') showing lot lines, mobile home pads, streets, driveways, walks, utility connections, mobile home supports and tie-downs, patios, decks, storage sheds, fencing, and landscaping.
- c. PARK DESCRIPTION: identifying the nearest city and the land uses surrounding the park.
- d. ACTUAL COST INFORMATION: identifying the following for each major construction phase:

Land Cost (# Acres Purchased _____)	\$ _____
Construction Cost (Bid Date _____)	\$ _____
Design Cost	\$ _____
Administration/Overhead Cost	\$ _____
- e. FINAL COST ESTIMATE: Summary estimate reflecting most accurate cost breakdown available for major design elements actually built. We realize that the actual construction cost shown above and the total estimated construction cost may differ. We are interested in costs of community facilities, unusual land improvements costs, site preparation, paving, utilities, landscaping, fencing, and mobile home accessories provided by the park owner.

VI. CONCLUSIONS

- 52. a. Are you a member of your state mobile home association? a. 1. Yes ; 2. No .
- b. If No, why not? _____
- c. If Yes, what do you think the associations have done for mobile home park owners and managers? _____

-P12-

53. What do you see as your major problems in the operation of a mobile home park?
(Check one or more, and specify others)
- | | |
|--|-----------------------------|
| a. maintenance of the park | a. <input type="checkbox"/> |
| b. maintenance of streets, lights, etc. versus
conventional public dedication | b. <input type="checkbox"/> |
| c. stigma of parks by outside community | c. <input type="checkbox"/> |
| d. tenant problems | d. <input type="checkbox"/> |
| e. financial concerns for changes in park | e. <input type="checkbox"/> |
| f. other (Specify) _____ | f. <input type="checkbox"/> |
-
54. What changes and suggestions do you have to make your park better than it
already is? (Check one or more)
- | | |
|----------------------------------|-----------------------------|
| a. good management | a. <input type="checkbox"/> |
| b. location of park | b. <input type="checkbox"/> |
| c. strict rules and regulations | c. <input type="checkbox"/> |
| d. tenant screening | d. <input type="checkbox"/> |
| e. better security | e. <input type="checkbox"/> |
| f. better design of parks | f. <input type="checkbox"/> |
| g. better design of mobile homes | g. <input type="checkbox"/> |
| h. fair prices for tenants | h. <input type="checkbox"/> |
| i. more and better facilities | i. <input type="checkbox"/> |
| j. other suggestions _____ | j. <input type="checkbox"/> |
-
55. What do you think should be the optimal size of a mobile home park? .
- | | |
|------------------------------------|---------------------|
| a. number of spaces | a. _____ spaces |
| b. number of units per gross acre | b. _____ units/acre |
| c. Please give your reasons: _____ | |
| _____ | |
| _____ | |
-
56. What suggestions do you have for changes in:
- the design of the mobile home parks
 - the design of the mobile home
 - existing regulations by government agencies and legislation
 - dealerships
 - other (Please specify)

WE THANK YOU FOR YOUR TIME AND PATIENCE IN HELPING US WITH THIS PROJECT

4.

Copy of the PMHI/PS Follow-Up
Questionnaire

QUESTIONNAIRE

PROTECTION OF CONFIDENTIAL INFORMATION

TO ENSURE THAT PROPRIETARY INFORMATION IS HANDLED IN STRICTEST CONFIDENCE, THE QUESTIONNAIRE HAS BEEN GIVEN A CONTROL NUMBER. THIS AND ADDITIONAL PROTECTIVE MECHANISMS THAT ARE BEING ESTABLISHED ASSURE THAT IT WILL NOT BE POSSIBLE TO ASSOCIATE ANY RESPONSE WITH A SPECIFIC COMPANY.

Note

For annual data, please use calendar year or, where necessary, the 12-month period most closely corresponding to the calendar year. Please indicate below which 12-month period you will be using if you are not using calendar year figures. 12-Month period used: _____.

-P2-

1. In what state is your park located? _____
2.
 - a. How many gross acres does your park consist of? a. _____ acres
 - b. How many total mobile home spaces does your park have? (Exclude spaces for short-time travel trailers, if any). b. _____ spaces
 - c. If you have facilities and spaces for short-time travel trailers, for how many such units do you have spaces? c. _____ spaces
3. Excluding the owner and the park manager, how many people do you employ?
 - a. full-time a. _____
 - b. part-time b. _____
4. How old are the units in your park?
 - a. 2 years or less a. _____ % of total
 - b. 3 - 10 years b. _____ % of total
 - c. 11 - 20 years c. _____ % of total
 - d. 20 - 25 years d. _____ % of total
 - e. over 25 years e. _____ % of total
5. What usually happens to homes which leave the park? (Check one or more)
 - a. move to another park of comparable quality a.
 - b. move to another less desirable park b.
 - c. move to rural location on individual lot c.
 - d. used for second homes/vacation areas d.
 - e. used as hunting lodges e.
 - f. used as sheds f.
 - g. used as construction offices g.
 - h. refurbished or sold in a used market h.
 - i. used for scrap metal i.
 - j. abandoned somewhere j.
 - k. do not know k.
 - l. other (Please specify): _____ l.
6. Did the park owner become involved in parks as an outgrowth from any of the following areas? (Check one or more)
 - a. mobile home dealer a.
 - b. mobile home manufacturing b.
 - c. trailer-recreational vehicle park development or operation c.
 - d. building manufacturing d.
 - e. land development other than mobile home or trailer parks e.
 - f. on-site residential construction f.
 - g. other (Please specify): _____ g.
 - h. No, went straight in mobile home park operation h.

-P3-

7. Is the owner of the park now in or planning to expand into any of the following activities by 1974? (Check one or more)

	<u>Presently In</u>	<u>By 1974</u>
a. mobile home manufacturing	a. <input type="checkbox"/>	<input type="checkbox"/>
b. mobile home dealerships	b. <input type="checkbox"/>	<input type="checkbox"/>
c. cooperatives of mobile homes	c. <input type="checkbox"/>	<input type="checkbox"/>
d. condominiums of mobile homes	d. <input type="checkbox"/>	<input type="checkbox"/>
e. mobile home subdivisions	e. <input type="checkbox"/>	<input type="checkbox"/>
f. trailer-recreational park development	f. <input type="checkbox"/>	<input type="checkbox"/>
g. mobile home consumer financing	g. <input type="checkbox"/>	<input type="checkbox"/>
h. on-site residential construction	h. <input type="checkbox"/>	<input type="checkbox"/>
i. on-site non-residential construction	i. <input type="checkbox"/>	<input type="checkbox"/>
j. production of building supplies	j. <input type="checkbox"/>	<input type="checkbox"/>
k. distribution of building supplies	k. <input type="checkbox"/>	<input type="checkbox"/>
l. don't know	l. <input type="checkbox"/>	<input type="checkbox"/>
m. other (Please specify): _____	m. <input type="checkbox"/>	<input type="checkbox"/>

8. a. Does the owner own other mobile home parks? a. 1. Yes ; 2. No
 If Yes:
 b. How many parks? b. _____
 c. What is their total space capacity? c. _____ no. spaces
 d. In what states are these parks located?

9. Were you the developer of your park or did you purchase it (please check)?

10. What was the zoning status of the land before park development? (Check one or more)

a. single family residential	a. <input type="checkbox"/>
b. multifamily residential	b. <input type="checkbox"/>
c. commercial	c. <input type="checkbox"/>
d. industrial	d. <input type="checkbox"/>
e. mobile home parks	e. <input type="checkbox"/>
f. other (Please specify): _____	f. <input type="checkbox"/>

11. What do you estimate your total costs were to obtain the desired zoning for the development of this park? \$ _____

12. If you developed this park from scratch, how much did it cost? (Please specify, if applicable, for each phase of development).

Phase I _____ no. of spaces; _____ date completed; \$ _____
 Phase II _____ no. of spaces; _____ date completed; \$ _____
 Phase III _____ no. of spaces; _____ date completed; \$ _____

(If more than three phases, please continue on a separate sheet.)

TOTAL DEVELOPMENT COSTS (include land, design, construction, administration, overhead) \$ _____

-P4-

13. If you purchased this park, what was the purchase price? \$ _____
In what year? 19____.
14. How was the park financed? (Please check)
- | | |
|----------------------------------|-----------------------------|
| a. bank (conventional mortgage); | a. <input type="checkbox"/> |
| b. second mortgage; | b. <input type="checkbox"/> |
| c. FHA insured; | c. <input type="checkbox"/> |
| d. financed by previous owner; | d. <input type="checkbox"/> |
| e. other (Please specify) _____ | e. <input type="checkbox"/> |
-
15. What were the financing terms?
- | | |
|-------------------|----------------|
| a. Loan amount | a. \$ _____ |
| b. Interest rate | b. _____% |
| c. Length of loan | c. _____ years |
16. Is your park a rental, condominium, cooperative or subdivision (Please check)?
17. Do you also sell mobile homes? Yes ; No . If yes, what percentage of your park residents purchased their homes from you? _____%
18. In 1972, what percentage of total annual revenue came from:
- | | |
|---|-----------|
| a. park space rentals | a. _____% |
| b. lot sales | b. _____% |
| c. mobile home sales | c. _____% |
| d. mobile home rentals | d. _____% |
| e. utilities | e. _____% |
| f. overnight stay/
recreational vehicles | f. _____% |
19. How is the taxing of mobile homes treated in your state? (Check one)
- | | |
|----------------------------------|-----------------------------|
| a. personal property | a. <input type="checkbox"/> |
| b. real estate | b. <input type="checkbox"/> |
| c. vehicle | c. <input type="checkbox"/> |
| d. other (Please specify): _____ | d. <input type="checkbox"/> |
-
20. a. How much are your 1973 rentals and prices (if applicable)?
- | | Lot Rentals | Lot Prices (lots for sale) |
|------------|--------------------|----------------------------|
| 1. lowest | \$ _____ per month | \$ _____ |
| 2. average | \$ _____ per month | \$ _____ |
| 3. highest | \$ _____ per month | \$ _____ |

-P5-

b. What is included/not included in this price or rent? (Check one or more)

	Included in Charges		Not Included
	Sale	Rent	
1. initial hookup of home to utilities	1. <input type="checkbox"/>	<input type="checkbox"/>	1. \$ _____
2. water	2. <input type="checkbox"/>	<input type="checkbox"/>	2. \$ _____ per year
3. gas (central system)	3. <input type="checkbox"/>	<input type="checkbox"/>	3. \$ _____ per month
4. sewer (central system)	4. <input type="checkbox"/>	<input type="checkbox"/>	4. \$ _____ per month
5. electricity	5. <input type="checkbox"/>	<input type="checkbox"/>	5. \$ _____ per month
6. garbage pickup	6. <input type="checkbox"/>	<input type="checkbox"/>	6. \$ _____ per month
7. taxes (Identify) _____	7. <input type="checkbox"/>	<input type="checkbox"/>	7. \$ _____ per month
8. park maintenance (community facilities)	8. <input type="checkbox"/>	<input type="checkbox"/>	8. \$ _____ per year
9. maintenance of individual lots (private areas)	9. <input type="checkbox"/>	<input type="checkbox"/>	9. \$ _____ per year
10. mobile home unit	10. <input type="checkbox"/>	<input type="checkbox"/>	10. \$ _____
11. mobile home supports (type: _____)	11. <input type="checkbox"/>	<input type="checkbox"/>	11. \$ _____
12. mobile home skirts (type: _____)	12. <input type="checkbox"/>	<input type="checkbox"/>	12. \$ _____
13. other accessories (Please specify) _____	13. <input type="checkbox"/>	<input type="checkbox"/>	13. \$ _____
14. other items (Please specify) _____	14. <input type="checkbox"/>	<input type="checkbox"/>	14. \$ _____

21. It would be extremely helpful to our project if you could send us your most recent balance sheet and income statement. Protective mechanisms that we have established assure that it will not be possible to associate any response with a specific park. As a further guarantee of anonymity, please, omit or blot out names and addresses.

WE THANK YOU FOR YOUR TIME AND PATIENCE IN HELPING US WITH THIS PROJECT