Mobile home parks: an investment opportunity

Curtis Jack Hesler

The University of Montana

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MOBILE HOME PARKS:
AN INVESTMENT OPPORTUNITY

by

CURTIS J. HESLER

B.S. University of Montana, 1967

Presented in partial fulfillment of the requirements
for the degree of
Master of Business Administration

UNIVERSITY OF MONTANA
1970

Approved by:

[Signatures]
Chairman, Board of Examiners
Dean, Graduate School
Date
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<td>4</td>
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</tbody>
</table>
CHAPTER 1

Introduction

Housing is the subject of this paper. The study is designed to discuss the supply of environment available for those who own transportable homes and to investigate and evaluate the mobile home park industry as an investment opportunity. In analyzing this opportunity it is desirable to begin with the following understanding of investment. An investor must be able to perceive beyond the dollars committed and returned if he is to reach the ultimate goal of investment. Many see such a goal as maximum profit or maximum increase in purchasing power, but the true goal extends one step beyond. It is survival.

Gerald M. Loeb, who is referred to as "one of the most astute stock market men in Wall Street," emphasizes this point rather well:

"Investment" is fundamentally an effort to obtain, in addition, a rental from others for the temporary use of capital.

"Speculation" means using the capital in such a manner that its spending power is not only preserved but increased, through the realization of profits in the form of dividends, or capital gains, or both.

Successful investment is a battle for financial survival.

Thus, we conclude that a good investment must be more than profitable; it must survive to be continually profitable.

Population has been a subject of economic discussion

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since 1798 when Malthus wrote his Essay on the Principle of Population as it Affects the Future Improvement of Society. His concern centered primarily with the question of food, but in our American society, productive capacity in this area seems to progress faster than the need. Today, people are hungry because of distributive rather than productive problems. However, our housing is feeling the pressure of population and is falling short in supply. This housing shortage is the result of both productive and distributive problems.

A recent article in Fortune magazine remarked:

"Dwelling units will be needed—no doubt about that. There is evidence of a housing shortage now and it will be getting worse. The vacancy rate, for example, is at a level much lower than at any time in the 1960's." 2

It is apparent from remarks such as this that there is only a slight awareness of this impending crisis by a few private individuals. What is somewhat more comforting is an awakening on the part of the government. "A decent home and suitable living environment is an objective of both the 1949 and 1968 housing acts," 3 reports a recent publication by Goodbody & Co. If this awareness on the part of public and private institutions is to result in positive solutions, housing presents a staggering challenge when all of the per-

---


Tinent facts are compared.

The following is a table from the Report of the President's Committee on Urban Housing (The Kaiser Report), published in 1968.
<table>
<thead>
<tr>
<th>Construction of New Standard Units</th>
<th>Metropolitan Areas</th>
<th>Total U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units for New Households</td>
<td>10.6</td>
<td>13.4</td>
</tr>
<tr>
<td>Replacement of Net Removals of</td>
<td>2.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Standard Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for Vacancies</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td>13.9</td>
<td>18.0</td>
</tr>
<tr>
<td>Replacement or Rehabilitation of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substandard Units</td>
<td>3.5</td>
<td>8.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17.4</td>
<td>26.7</td>
</tr>
</tbody>
</table>

4 Ibid., p. 3.
This table clearly points out that to meet the housing shortage almost 27 million housing units must be constructed in the 1970's. This is nearly double the 14 million plus units built in the previous decade.\(^5\)

There is a great deal of talk about the present housing slump. A *Fortune* article announced:\(^6\)

The slump in housing still has a way to go. It has already gone a long way: The rate of private non-farm housing starts has dropped from 1,845,000 last January to 1,323,000 in August. In Fortune's latest semi-annual survey, builders of houses and apartments anticipate no further decline during the rest of the year, but right now the rate is plainly bending still lower, and many observers think it may go all the way down to one million or so by the end of 1969.

Housing starts are seasonal, and thus a declining mid-year rate in starts need cause no alarm. However, year end totals concur and show no progress. See Exhibit 1.\(^7\) Conventional Housing starts are not expanding. In fact, the highest level of 1,642,000 starts in 1963 has never been equaled. We are faced with the necessity for amazing progress in home production.

Regarding the figures and the projection for 1969, Goodbody & Co. states,\(^8\)

\(^5\)Ibid.

\(^6\)Parker, *op.cit.*, p. 28.


\(^8\)Goodbody & Co. *op.cit.*, p. 3.
EXHIBIT I

MOBILE HOMES & CONVENTIONAL DWELLING UNITS COMPARED

MOBILE HOMES AND CONVENTIONAL DWELLING UNITS COMPARED

1960 - First Quarter: 1965

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL MOBILE HOMES</th>
<th>TOTAL CONVENTIONAL DWELLINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1962</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1963</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1964</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1965</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1966</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1967</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1968</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
<tr>
<td>1969</td>
<td>1,399,7</td>
<td>1,379,9</td>
</tr>
</tbody>
</table>

MONTHLY PRODUCTION

(1) Mobile Homes, Sales, Stocks and Shipments, "Marketer Inquiry Report," Chicago, Illinois
(2) "Construction Report, NHOA," U.S. Bureau of the Census

TREND LINE COMPARISON

MOBILE HOMES PRODUCED (1) AND CONVENTIONAL PRIVATE NON-FARM INDEPENDENT FAMILY HOUSING STARTS (2)

MONTHLY PRODUCTION AND 12-MONTH TOTALS

Note: Mobile homes sales (or right of use) is at one tenth of conventional housing scale (or left) to facilitate direct comparison of trend lines.
### 1962 - 1969

#### Mobile Home Units Shipped by Manufacturers (1) vs. Private Nonfarm Conventional One-Family Starts (2)

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Units</th>
<th>Mobile Home in % of</th>
<th>Number of Years</th>
<th>Mobile Home in % of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mobile Home</td>
<td>Total</td>
<td>Mobile Home</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>12 Months Ending</td>
<td></td>
<td>12 Months Ending</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td></td>
<td>Production</td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>50,050</td>
<td>6,850</td>
<td>9,850</td>
<td>11,640</td>
</tr>
<tr>
<td>February</td>
<td>53,100</td>
<td>7,130</td>
<td>9,940</td>
<td>11,640</td>
</tr>
<tr>
<td>March</td>
<td>78,250</td>
<td>8,280</td>
<td>10,940</td>
<td>12,340</td>
</tr>
<tr>
<td>April</td>
<td>59,100</td>
<td>6,540</td>
<td>9,040</td>
<td>9,940</td>
</tr>
<tr>
<td>May</td>
<td>56,350</td>
<td>5,750</td>
<td>8,500</td>
<td>9,010</td>
</tr>
<tr>
<td>June</td>
<td>92,200</td>
<td>7,860</td>
<td>10,660</td>
<td>11,460</td>
</tr>
<tr>
<td>July</td>
<td>93,300</td>
<td>8,650</td>
<td>10,880</td>
<td>11,640</td>
</tr>
<tr>
<td>August</td>
<td>97,700</td>
<td>9,150</td>
<td>10,260</td>
<td>10,880</td>
</tr>
<tr>
<td>September</td>
<td>71,200</td>
<td>7,800</td>
<td>9,560</td>
<td>10,260</td>
</tr>
<tr>
<td>October</td>
<td>88,100</td>
<td>10,500</td>
<td>11,000</td>
<td>11,640</td>
</tr>
<tr>
<td>November</td>
<td>73,200</td>
<td>8,650</td>
<td>9,850</td>
<td>10,660</td>
</tr>
<tr>
<td>December</td>
<td>54,950</td>
<td>7,280</td>
<td>8,560</td>
<td>9,850</td>
</tr>
<tr>
<td>1963</td>
<td>45,900</td>
<td>6,500</td>
<td>8,000</td>
<td>9,850</td>
</tr>
</tbody>
</table>

In 1968 there were about 1.5 million housing starts and we estimate the total for 1969 at 1.4 million. Taking this year's figures as a base and assuming that an upward trend could be started in 1970 and maintained over the next ten years it would require a compounded growth rate of over 11% annually to build the 27 million units. Such a growth rate would place housing starts at about 2.0 million in 1972, 3.1 million in 1976, and 4.3 million in 1979.

This presents a rather grim shadow on our future standard of living. We seem to need an 11% compounded growth in housing starts and are recently suffering a decline. There clearly is a challenge.

This previous analysis overlooks a very important source of housing—mobile home production. Conventional housing starts include only farm, non-farm, single and multiple dwellings. Mobile home production is not included in government figures on housing starts, yet the mobile home is a real and positive satisfier of the housing requirement. When mobile home production is taken into account the housing supply figures are a little more pleasing. Exhibit 1 helps to describe the importance of mobile homes in determining total housing supply.

---

As a point of clarity the following is a breakdown of mobile home shipments for 1964 through 1968. It indicates that the mobile home figures given previously are net of exports and factory sales. Analysis of Manufactures Shipments. During 1968, 98% of all production was shipped to dealers.

<table>
<thead>
<tr>
<th>Years</th>
<th>1964</th>
<th>1965</th>
<th>1966</th>
<th>1967</th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of Exports &amp; Factory Sales</td>
<td>4,600</td>
<td>5,570</td>
<td>5,400</td>
<td>4,750</td>
<td>6,490</td>
</tr>
<tr>
<td>Shipments to Dealers in the US.</td>
<td>191,320</td>
<td>216,470</td>
<td>217,300</td>
<td>240,360</td>
<td>324,440</td>
</tr>
<tr>
<td>Total Production</td>
<td>195,920</td>
<td>220,040</td>
<td>222,700</td>
<td>245,110</td>
<td>324,440</td>
</tr>
</tbody>
</table>

These figures indicate that for the period 1960 through March, 1968, the true total for new housing produced was 13,265,000 conventional units, plus 1,732,800 mobile home units. Consequently referring to Exhibit 1 mobile homes accounted for 11.6% of the total new housing produced during the period or an increase over convention housing of 13.1%. Of single family units (which mobile homes have traditionally been) they account for 17.1%. This is an increase over conventional, single family houses of 20.7%.

Furthermore, mobile homes are growing in importance. In 1960 they represented 7.4% of total housing produced and have gained to 20.6% in the first months of 1969. In 1969 mobile homes accounted for 34.1% of all single family residences produced, or an increase over the convention of 51.5%. These gains are explained by Bair: "Thus the gain in the mobile home share is due to a combination of very high gains in mobile home production and a slow decline in conventional starts". He refers here to single family residences.

Exhibit 1 shows a trend line comparison utilizing a twelve-month moving total method, such that any point on the graph shows the previous twelve months' production. Notice the seasonal variations in conventional housing starts and the consistency in mobile home production (see Exhibit 1, Data Table). The twelve months moving totals smooth this out. The steady progress being made by mobile homes as a percent-

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10 Bair, op. cit., p. 2-3.
The age of conventional housing is most apparent when the seasonal variations are eliminated.

There are two reasons for the mobile home's gaining importance as a supplier of housing. First, there is presently a demand for low-cost housing which is partially due to the rising cost of dwellings and tight monetary conditions. This is essentially a productive problem. Costs are rising and will apparently continue to do so; Goodbody states: We believe construction costs in 1970 will continue to rise and at least duplicate this year's 8% to 9%.

Fortune places this figure at a 10% increase. Since much of this extra cost is attributed to expensive skilled labor and complicated by erratic periods of production because of adverse weather conditions, the situation promises little improvement in the future. Mobile homes, however, are factory built, utilize less expensive and less skilled labor, and are not dependent on favorable weather for construction. They therefore solve much of the productive problem.

The second reason involves the prime mobile home market and involves a distributive problem. It is logical that the young married, retired, and semi-retired portion of the population experience a lower than average income. They need low-cost housing and seek to satisfy this need with mobile homes. By studying this market we can see what is in store for the

11Goodbody, op. cit., p. 4.
12Parker, op. cit., p. 30.
future mobile home demand. Exhibit 11\textsuperscript{13} is a schedule of age groups with an accompanying graph. The drop in the 20-29 group in 1955 is attributed to the low birth rates during the depression. However, the increase from 1965 to 1968 is attributed to the baby boom of the 1940's. "The gains from 1965 to 1970 will be in the neighborhood of 25\%, with increases in years 1970-1975 and 1970-1980 successively less but still strong."\textsuperscript{14} Considering the 20 to 34 age group, Goodbody & Co. reports, "A projection of the population in the United States indicates that the 20-34 year-old age group, the largest market for housing, will rise to over 66 million in 1980, 14\% above the 47 million of 1968."\textsuperscript{15} This category, 20-34 years, furthermore accounts for a significant share of the heads of households. "In the general population in 1967, 23.6\% of the heads of households were under 35 years of age. Among mobile home households, 49.4\% were under 35."\textsuperscript{16} Thus, this youth group accounts for a large share of both the demand for new housing and mobile homes.

The second important group is the older, retired or semi-retired citizen. Exhibit 11 shows figures for the 65-74 age group. The increase in this group is not so spectacular

\textsuperscript{13}Bair, op. cit., p. 7.

\textsuperscript{14}Ibid.

\textsuperscript{15}Goodbody & Co., op. cit., p. 2-3.

\textsuperscript{16}Bair, op. cit., p. 8.
but is substantial. From 1968 to 1980 they will increase from 11,785,000 to 14,457,000 or about 25%.

Both of these groups has a potential of becoming even more significant. There is the prospect of troop reduction in Viet Nam. This should release new young people into the conventional housing market. The older group may expand through earlier retirement ages. "Retirement at age 60 would increase the prime retirement market for mobile homes by about 60% in the years between 1970 and 1980, with only limited effect in earlier years but with strong impact as retirement age actually drops."17 Another factor is the prospect that this group's economic status is improving. "In 1950 only 16% were receiving OASDI (Social Security) benefits. Currently, the proportion is about five times that level, around 80%, and amount of benefits in constant dollars is around 50% above the 1950 level."18

It was previously mentioned that the young married, retired and semi-retired portion of the population experience a lower than average income. The median family income for the 65 years and older group in 1968 was $4,360 per year. The younger 24-35 year group received a median income of $7,975. Nationwide, the median income was slightly higher at $8,223.19

A study by a major California bank observed that "65%
EXHIBIT II.

COMPOSITION OF POPULATION BY AGE GROUP

<table>
<thead>
<tr>
<th>Year</th>
<th>20-29</th>
<th>65-74</th>
<th>20-29 + 65-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>23,814,000</td>
<td>8,470,000</td>
<td>32,287,000</td>
</tr>
<tr>
<td>1955</td>
<td>21,998,000</td>
<td>9,808,000</td>
<td>31,806,000</td>
</tr>
<tr>
<td>1960</td>
<td>22,049,000</td>
<td>11,033,000</td>
<td>33,082,000</td>
</tr>
<tr>
<td>1965</td>
<td>24,297,000</td>
<td>17,487,000</td>
<td>41,784,000</td>
</tr>
<tr>
<td>1968</td>
<td>28,247,000</td>
<td>11,785,000</td>
<td>40,032,000</td>
</tr>
<tr>
<td>1970</td>
<td>31,139,000</td>
<td>12,097,000</td>
<td>43,236,000</td>
</tr>
<tr>
<td>1975</td>
<td>36,748,000</td>
<td>13,191,000</td>
<td>49,939,000</td>
</tr>
<tr>
<td>1980</td>
<td>40,472,000</td>
<td>14,457,000</td>
<td>54,929,000</td>
</tr>
</tbody>
</table>

of the eligible home buyers in the nation earn less than $8,000 a year." Bankers use a rule of thumb that a person should not spend more than two and one-half times his income on a home. If we expand this rule of thumb and assume the $8,000 is family income, this means most home buyers should be seeking less than $20,000 homes. The Goodbody report stresses that "mobile homes are expected to account for about 90% of all new homes sold for under $20,000 this year."

These preceding facts point out that mobile homes are an important expanding method of shelter in our society. Furthermore, the mobile homes' environment is a crucial factor. For every additional mobile home there is a need for adequate surroundings in which to park it. The housing problem cannot be solved by merely supplying the living unit. Unless the environment in which that unit is positioned is adequate and available, the quality and quantity of the units themselves are of little significance. Proper environment is essential to the standard of living. Because a lack of adequate mobile home environment exists, "There is a tremendous need for attractive parks and the demand will increase." To a similar classic statement by a mobile home owner: "We had learned that the biggest problem you can have with a mobile home is where to immobilize it." A reader replied

---

21 Mobile Home Park Specialists. Mobile Home and Recreation Park Feasibility Study (Van Nuys, Calif.: Mobile Home Park Specialists.)
"... perhaps the truest statement in the entire article."24 Consequently, satisfaction of the need for adequate space by investment in mobile home parks may be at least a partial answer to the housing crisis.

There is a need for parks now. Many of the existing parks are not adequate. "From all over the country people report: 'We would like to live in a mobile home if we had a place to put it---a nice park in which to live.'"25 This is hindering the mobile homes' ability to provide housing. Those who already live in mobile homes voice the need for better parks as their primary dissatisfaction.26 The mobile home producers are themselves asking for parks. Curtis G. Fuller, the publisher of Woodall's Mobile Home Park Directory, states, "There's no place for new mobile homes to go. This is a serious situation; we need parks."27

"Compounding the problem is the fact that vacancy rates in existing parks dropped last year to 4.2%, very likely an all-time low."28 This low vacancy rate indicates that many existing parks are overcrowded. This may also indicate that the quality of environment is being reduced by

---


28 Ibid., p. 1
mobile home parks squeezing in extra tenants.

**PURPOSE OF THE RESEARCH**

The need for adequate parks will grow in the future with the expansion of the young and older age groups. People will continue to seek housing in the form of mobile homes. But, they will find them a satisfactory solution to housing only if adequate parks exist in which to place their homes. The environment of the housing unit is part of the housing problem.

Consequently, the purpose of this study is to investigate and evaluate the investment potential of constructing a large spacious mobile home park which will offer as much as the mobile home owner desires and needs for a truly residential environment. The housing need can be eased by the mobile home only if adequate parks can be built.

One unsatisfactory solution would be for the Government to begin building and renting parks. However, this type of total and direct government participation is undesirable. Thus, adequate parks can be built only if private investors can show a suitable return from the project. The Government could help in this solution by supplying loan resources.

The question to be answered is: Can the private investor offer the mobile home owner a residential subdivision environment with the qualities he desires, at a reasonable cost to the mobile home owner, and still make a suitable return on his investment?
RESEARCH DESIGN

This research will focus on the Missoula area which will include Lolo and East Missoula. However, the paper should remain relevant to other geographic areas.

A primary element is a set of surveys. The surveys produced information for two purposes. First, information was gathered to determine whether there is a market in Missoula for a large residential styled mobile home park. Such information as vacancy rates in existing parks, number of trailers sold, and the condition of competitive parks answer this question.

Second, the surveys produced information which is important in developing a new mobile home park. Such elements as age and number of children, and individual desires in park qualities vary in different localities and must be determined to insure that park design fits the market.

Secondary information was derived from the current literature presented in the accompanying bibliography. Also, court house records were utilized to determine information as to the size of the mobile home population.

The analysis of park construction and subsequent investment evaluation utilize the above information sources and proceed as follows:

1) The first area of consideration is zoning and a discussion of its influence on the proposed investment.

2) Location is the second element which is related to zoning. A number of guidelines or qualities of location
are developed. Then using this set of necessary qualities the most suitable area in the Missoula market is proposed and defended.

3) Design is the next point developed. The surveys are relied upon heavily to determine particular attributes necessary and desired by the Missoula market.

4) Once the area of location is selected and the general design determined, it is necessary to estimate how much the project will cost. This is the fourth step.

5) The final consideration is financing the project, and return for the investor. These are studied together as they are so related.

The conclusive element of the study is an evaluation of the fifth section. It is determined whether the investor can provide a large residential designed park which offers the mobile home owner those qualities he desired and needs, and still make a suitable return.

**HISTORY & DEFINITIONS**

In order to minimize complications caused by semantic misunderstanding, the history of mobile homes and parks and the definitions of the principal terms involved will be presented. The author and reader can then proceed on equal footing.

Years ago trailer parks were temporary "camps" in which transient people parked their house trailers for a limited period of time. The trailer park during this era was no more than a supplier of space. Then during World War II,
mobile home living gained popularity "in providing emergency accommodations for war workers and others who flocked by the hundreds to work in defense plants."\textsuperscript{28} As more people began to live in mobile homes, they improved in size and facilities. The early models were eight feet wide and under twenty-seven feet long. They had no bathroom facilities or conveniences of the conventional home. They were similar to the modern travel trailer.\textsuperscript{29}

The modern mobile home resident is less mobile. The Trailer Coach Association reports that "the average mobile home is moved only once in every five and one-half years."\textsuperscript{30} Another report on the industry states: "Nationally, the average mobile home is moved only once every five years and most are not moved again at all, once delivered to the purchaser."\textsuperscript{31} Still another study concludes: "The 'mobile' home, for long-term occupancy, is usually not moved often or far. And mobile home dwellers, considering their ages, incomes and occupations, do not move oftner (sic) than other people like them."\textsuperscript{32}

\textsuperscript{28} David F. Lyon, "Mobile Home Park Locations Needed in the West Due to Wide Acceptance of Mobile Homes," reprinted from California Real Estate Magazine, distributed by Trailer Coach Association, 1969, p. 1.

\textsuperscript{29} Bair, op. cit., p. 1.


\textsuperscript{31} Wells Fargo Bank National Association, op. cit., p. 5.

\textsuperscript{32} Bair, op. cit., p. 1.
Consequently, parks today must offer everything that the normal subdivision might. The modern mobile home park is typically large (in excess of 100 spaces) and of low density (eight - nine spaces per acre, including streets, parks, etc.). Not all parks today are of this description but all fall into one or a combination of the following categories.

"Service oriented" Park-- This category is directed at the retired, semi-retired and older couples whose "children have grown up and established homes of their own but who are still a considerable time-distance from retirement."33 A prominent feature of the service oriented park is the stability of tenants in terms of length of stay and low concentration of children.34

"Housing Oriented" Park-- "The principle function of housing oriented parks is to provide housing accommodations for working people. Recreational and social facilities appear to be of somewhat less importance."35 There likewise seems to be a low concentration of children, "only about 20% of the families have children and their ages are usually preschool. Only half of those children present are of school age."36

34Ibid.
35Ibid.
36Ibid.
"Resort Park"-- this is a park designed primarily for resort and recreation residents. These would tend to be second homes for the residents and would be located near such attractions as lakes, or favorable climatic conditions.  

The usual park will ordinarily encompass aspects of each of these ideal categories. Many parks segregate their tenants to provide a park of mixed market appeal.

The mobile home itself must be clearly distinguished from the travel trailer.

A Travel Trailer is defined as "units less than 29 feet in length, regardless of weight, or weighing 4,500 pounds, regardless of length." They also do not exceed eight feet in width and may be moved upon a public highway without a special permit or license.

A Mobile Home is defined as "... a vehicular, portable structure built on a chassis and designed to be used without a permanent foundation as a year-round dwelling when connected to utilities." (This makes the distinction

---

37 Ibid., pp. 6-7.
38 U.S. Bureau of the Census, op. cit., Table #1078, p. 698.
40 U.S. Bureau of the Census, op. cit., Table #1078, p. 698
between mobile homes and sectional homes or modules which are not built on a chassis and designed for a permanent foundation. Once set up the sectional home is not designed to be moved.) "Mobile homes are defined as units 29 feet or longer and weighing in excess of 4,500 pounds."41

There are two variations in the typical mobile home. The expandibles that are designed with a section which upon setting up telescopes out from the side of the trailer. The double wide is a "mobile home composed of two separately licensed vehicles, each of which is designed to be attached directly to each other."42

The size of the mobile home is increasing. In 1954 the ten-foot wide was introduced. Exhibit III shows its popularity by 1961. In 1962 the 12-foot wides were introduced but were not as successful as the expandibles and double-wides. This was on account of legal restricts as to their transportation on state highways. As this hurdle was removed they rapidly gained popularity.

Recently 14-foot wides have been introduced but suffer the same setbacks as the 12-foot wides originally. Furthermore, double wides, expandibles and 14-foot wides suffer from limited room in parks.43 Without technological breakthroughs in transportation, etc., the popularity of

41 Ibid.


43 Bair, op. cit., p. 1.
EXHIBIT III
MANUFACTURES SHIPMENTS OF MOBILE HOMES TO DEALERS
CLASSIFIED BY WIDTH & LENGTH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8-wides</td>
<td>20.9</td>
<td>9.5</td>
<td>1.9</td>
<td>2.0</td>
<td>1.5</td>
<td>0.9</td>
<td>0.9</td>
<td>0.5</td>
<td>0.3</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>39' &amp; under</td>
<td>18.2</td>
<td>8.7</td>
<td>1.0</td>
<td>1.5</td>
<td>1.28</td>
<td>0.8</td>
<td>0.8</td>
<td>0.4</td>
<td>0.2</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>40' &amp; over</td>
<td>2.7</td>
<td>0.8</td>
<td>0.9</td>
<td>0.5</td>
<td>.22</td>
<td>0.1</td>
<td>0.1</td>
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<td>0.1</td>
<td>0.0</td>
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</tr>
<tr>
<td>10 Wides</td>
<td>79.1</td>
<td>90.5</td>
<td>88.1</td>
<td>72.7</td>
<td>73.3</td>
<td>59.8</td>
<td>41.3</td>
<td>24.6</td>
<td>7.3</td>
<td>2.2</td>
<td>0.6</td>
</tr>
<tr>
<td>39' &amp; under</td>
<td>2.8</td>
<td>2.0</td>
<td>1.9</td>
<td>0.8</td>
<td>0.4</td>
<td>0.5</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>40 - 49'</td>
<td>25.3</td>
<td>17.4</td>
<td>10.5</td>
<td>7.0</td>
<td>6.1</td>
<td>6.9</td>
<td>9.3</td>
<td>7.5</td>
<td>2.7</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>50 - 59'</td>
<td>51.0</td>
<td>70.4</td>
<td>82.4</td>
<td>62.3</td>
<td>63.7</td>
<td>49.3</td>
<td>27.8</td>
<td>13.6</td>
<td>3.1</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>60' &amp; over</td>
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<td>3.3</td>
<td>2.6</td>
<td>3.1</td>
<td>3.1</td>
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<table>
<thead>
<tr>
<th>Expandibles &amp; Double Wides</th>
<th>20.3</th>
<th>18.8</th>
<th>18.2</th>
<th>12.7</th>
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<th>8.3</th>
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<th>9.4</th>
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<td>44' &amp; under</td>
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<td>0.7</td>
<td>1.6</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.9</td>
</tr>
<tr>
<td>45 - 49'</td>
<td>1.9</td>
<td>1.9</td>
<td>.6</td>
<td>.6</td>
<td>.5</td>
<td>.6</td>
<td>.6</td>
<td>2.3</td>
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<tr>
<td>50 - 54'</td>
<td>8.8</td>
<td>6.0</td>
<td>5.4</td>
<td>4.4</td>
<td>2.6</td>
<td>2.1</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>55 - 59'</td>
<td>7.6</td>
<td>8.1</td>
<td>7.4</td>
<td>4.7</td>
<td>3.0</td>
<td>1.7</td>
<td>2.0</td>
<td>3.5</td>
</tr>
<tr>
<td>60' &amp; over</td>
<td>1.0</td>
<td>2.1</td>
<td>3.2</td>
<td>1.9</td>
<td>2.4</td>
<td>2.6</td>
<td>4.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

TOTAL 100%
homes wider than 14 feet seems improbable. "It now appears that the maximum size of mobile homes is somewhat stabilized by practical and legal limitations."\footnote{"Mobile Home Lending: Do Park Loans Come First?" reprinted from \textit{Savings and Loan News}, July, 1969, p. 3.}

**LIMITATIONS**

There are certain areas in which only imperfect knowledge is available. First of all in discussing construction, actual construction costs can only be estimated unless there were a piece of ground specified and actual bids taken. These estimates, however, can be obtained locally and compared with national averages and cost figures from other geographical areas.

There are some activities such as actual design and layout which must be done by experts and specifically applied to a particular parcel of land. One can, however, discuss certain general aspects of design and layout that are desirable and present sample layouts and designs which exemplify solutions to typical problems.

Actual site acquisition and cost is a big hurdle because, without an actual site to evaluate, costs must be estimated. But again there are proper qualities of land which can be discussed concerning mobile home park development and the most suitable area can be proposed. The typical pitfalls can be recognized and thus avoided. Also, the acquisition of an actual parcel may depend upon more than
the ability to pay for it. Some individuals have a stronger political or social position and can consequently obtain what others cannot.

Standards will be discussed but specifics as to the proper design of sewer systems and other utilities should be left to experts in that field.

These limitations need not detract from the purpose of evaluating the mobile home park as an investment. The dealer, large corporation, small shareholder, board director, independent contractor or anyone who finds himself confronted with the question of becoming involved with building a large mobile home park should be able to benefit extensively from this study.

The mobile home park is important in determining the quality of American housing. It is the investor's response to the need for quality environment for today's mobile home and especially tomorrow's, that will answer much of the housing challenge.
CHAPTER II
THE SURVEYS

In order to proceed and investigate whether the investor can offer the mobile home owner a residential subdivision environment with the qualities he desires, at a reasonable cost to the mobile home owner and still derive a suitable profit, a number of questions must be answered.

First it must be determined whether there is a demand for such a residential subdivision environment by the mobile home owner. It is one thing for the researcher to decide this is necessary; it is yet another thing to determine if the mobile home owner desires any improvement.

It has been established that nationally there is a need for mobile home parks and that this need is growing. However, the extent of the mobile home owner's needs and desires in the Missoula area remain unclarified.

In the event there seems to be dissatisfaction and a desire for better parks, the extent and nature of the qualities desired must be identified.

Consequently, the objective of the following set of surveys is first to determine if additional mobile home parks are warranted in Missoula and second, to determine the nature and scope of the mobile home owners' desires and needs in a mobile home park. Examples of the survey forms and summaries of results are included in the appendix.

While the park operator's survey and mobile home dealer's survey don't directly answer the above questions they provide a background which is essential in evaluating
these questions. Once they are discussed the park resident’s survey can be best analyzed. Then the three sets of information can be drawn together into a unified set of conclusions. Subsequent chapters will deal with the remaining questions of reasonable cost to the mobile home owner and suitable return to the investor.

MOBILE HOME DEALER’S SURVEY

It was intended that several mobile home dealers could be questioned in order that information as to the number, size and type of mobile homes being sold to the Missoula market could be ascertained. However, this survey was somewhat unsuccessful. It was hoped that information for years 1967-1969 could be gathered, but this involved too much research and cost on the part of the dealers themselves. Also, smaller dealers were more hesitant about giving out information. However, the two longest established dealers in this area were very co-operative. Since more information was not available the results are to be used merely as indicators and no confidence statements are possible on the results. The information gathered however, does aid in elaborating on the operator’s and resident’s survey.

The dealers reported sales at 1330 units in 1969. They indicated this was an increase over 1968. Of the 1330 about 480 were reported delivered to Missoula, Lolo, East Missoula or Bonner. Of this 480 about 303 would have included a trade-in which puts the new increase in trailers
caused by these two dealers at 77 units. The court house reports registrations increased by 237 during 1968-1969. As for how many new trailers are seeking places to park, it is difficult to pinpoint. Some of these 237 are new trailers, 77 of which were sold by the two represented firms. Some of the 237 are used trailers sold back into the market; some are people moving into Missoula with trailers; some are from sales by other dealers.

However, these figures do indicate that 100 sites would not be difficult to fill within one year. This assumes the lot rent is not beyond reach. The dealers did sound enthusiastic about new parks. They felt lack of space was holding sales back. Thus, by their co-operation in recommending a new park, they can aid in filling its vacancies quickly. This process should be easier if the park is extremely attractive at a moderate price.

The dealers reported the average age of a trade-in was 5-7 years; rarely over 7 years. It will be later shown that a relatively high proportion of mobile homes in the parks are in this age group.

The final question posed to dealers regarded trailer size sold. They reported over 50% of total sales were 12 wides in 1969. However, 14' wides have only recently been available in the Missoula market and they are swiftly becoming the most popular size. Consequently, pad sizes must allow for at least 14' widths.

Double wide sales are minimal as financing requires
a foundation be provided and the wheels removed. Also, a 40% down payment is the rule. This is forcing people to purchase sectional homes instead. Double wides in the future are expected to be completely replaced by these sectional homes.

Additional floor space is being created by length. The 14' wide is very comfortable and quite spacious if 60' long. The dealers report 70' lengths are becoming the rule. One dealer reported as an aside that the maximum length allowed on the highways was 90'. It seems reasonable that in the future mobile homes may be this long. This will cause a great deal of obsolescence in present mobile home parks, and will have a greater effect on park obsolescence than increased widths.

In conclusion, it must be remembered that the dealer can only sell what the park can accept. Thus, to build a park accepting longer trailers will enhance the dealer's sales. It follows that a nice park will entice potential mobile home residents who would be willing to live in a mobile home now if it were not for the existing subresidential park environments.

PARK OPERATOR'S SURVEY

The Park Operator's Survey was administered in the form of an interview, i.e., the interviewer verbally posed the questions and completed the form. The Survey was composed of four basic parts: A. General, which was
intended to compile a description of the park in general
terms; B. Utilities, which was to review the type of
utility services which are presently being offered; C.
Management Policy, which was to reveal a description of
prevalent policies enforced; and D. Design, which was to
derrive information describing the design qualities of
existing parks. The market information gained is necessary
in developing a park which will properly fit the Missoula
area.

The term "Missoula area" refers to that area in­
cluding Missoula, East Missoula, and Lolo. The Missoula
Chamber of Commerce publishes a listing of mobile home
parks in this area and those parks are summarized by size
in Exhibit IV.

No doubt there exist more parks than those pre­
sented. In 1969 the County Treasurer's office listed
total mobile home registrations at 1,667 mobile homes.
Homes which are registered are located in parks. Conse­
quently, the parks presented in Exhibit IV account for
913 of the 1,667 homes registered. The difference can
be reconciled by parks which are not listed, and recent
expansion of those parks which are listed. However, it
is felt the 913 spaces are representative.
## EXHIBIT IV

### STRATIFICATION OF MOBILE HOME PARK POPULATION

<table>
<thead>
<tr>
<th>Size of Park in No. Permanent Units</th>
<th>Number of Parks of Size Given in Col. 1</th>
<th>Total No. Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>20</td>
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<td>3</td>
<td>18</td>
</tr>
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<td>7</td>
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<td>8</td>
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<td>10</td>
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<td>80</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

**Totals "Small" Parks**

| 16                                | 1                                      | 16              |
| 17                                | 1                                      | 17              |
| 18                                | 1                                      | 18              |
| 20                                | 3                                      | 60              |
| 23                                | 1                                      | 23              |
| 24                                | 1                                      | 24              |
| 28                                | 1                                      | 28              |
| 30                                | 1                                      | 30              |
| 32                                | 1                                      | 32              |
| 34                                | 1                                      | 34              |

**Totals "Medium" Parks**

| 40                                | 1                                      | 40              |
| 42                                | 1                                      | 42              |
| 45                                | 1                                      | 45              |
| 70                                | 1                                      | 70              |
| 87                                | 1                                      | 87              |

**Totals "Large" Parks**

| 135                               | 1                                      | 135             |

**Totals "Extra Large" Parks**

| 1                                 | 1                                      | 135             |

**Totals All Parks**

| 50                                | 913                                     |
The park sizes seem to fall naturally into five groups—2-12 sites, 16-34 sites, 40-45 sites, 69-87 sites, and 135 sites. It is reasonable that fewer large parks will exist with larger differences between park sizes. Thus, the "large" parks category was created by consolidating the 40-45 and 69-87 site groups. The fourth group, "extra large" parks, was designated so that the 135-site park could be handled separately. The reasoning behind the grouping is to stratify the population into homogeneous segments.

The parks were thus stratified so that a small sample would yield meaningful results. It was not known before the survey was run whether or not the size of the park would have any bearing on the results. Consequently, parks were selected from the four segments, the logic being that one park from the larger, smaller, and central sizes of each segment would best represent that segment. Also, since parks of size 10 were so frequent one of these was included. It should be noted that when a particular park was selected, if it could not be studied because of refusal of the owner's co-operation or similar reason--another park of the same size or near same size was substituted. Also, in the event one park was needed from a size including more than one park the selection was random within that size.

Thus, fourteen parks were selected and studied. From the first segment, parks of size 3, 8, 10 and 11 were
interviewed; from the medium size segment size 17, 23, 24, 28, 32 were included; from large size segment park sizes 42, 45, 70 and 87 were studied. Finally, park size 135 was handled separately.

The owners of these parks, who also are the operators, were given the park operator's interview. The survey form was completed by the interviewer as he posed the questions to the park operator. An example of this survey form is included in the appendix.

All results except some general comments as to park age are presented in the following text as sample proportions in percentage terms. These proportions are summarized and presented with corresponding confidence limits in Exhibit V. The limits represent the customary 95% degree of confidence and were calculated using:

$$
\pi = P \pm 1.96 \sqrt{\frac{P(1-P)}{n}}
$$

where \( \pi \) = population proportion

\( P \) = sample proportion

\( n \) = sample size

The parks interviewed ranged in age from three years (park size 28) to over 18 years (park sized 8, 23, and 24). Contrary to what one might expect, age and size have no apparent correlation. There is no reason therefore to believe that parks begin small and grow with age.

The question of accommodating double wides was posed. Only four of the 14 parks or 28.5% would accept double wides
EXHIBIT V

PARK OPERATOR'S SURVEY CONFIDENCE LIMITS - 95%

<table>
<thead>
<tr>
<th>No. Responses out of 14 Possible</th>
<th>Equivilant Proportion</th>
<th>Confidence Limits  4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.07143</td>
<td>.13940</td>
</tr>
<tr>
<td>2</td>
<td>.14285</td>
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<td>3</td>
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<td>.21469</td>
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<td>8</td>
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<td>10</td>
<td>.71428</td>
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<td>.85714</td>
<td>.18334</td>
</tr>
<tr>
<td>13</td>
<td>.92857</td>
<td>.13940</td>
</tr>
<tr>
<td>14</td>
<td>≈.99999</td>
<td>≈.05194</td>
</tr>
</tbody>
</table>

Note: If 11 of the 14 operators questioned responded, this would represent .78572 (Col. 2) of the total 14. This proportion would run + .21469 if one were to be 95% confident.
and expandables and all totaled they supply 23 spaces. However, two of these provided nine spaces each, the other two supplied two and three spaces respectively. The conclusion is that some space is being provided but very little. However, when the question of double-wide sales was posed to the three dealers interviewed they reported very few double wide were being sold and no expandables. Furthermore, the dealers report those double wide that were sold were not delivered to parks. The reason is that double wide can be best financed if they are permanently installed with a foundation. This financing also requires about 40% down. This being the case, people are attracted to the sectionalized home rather than the double wide. It was also reported that double wide do not physically stand too much moving. The trend now is in the direction of longer 14' wide. 45

The parks in Missoula are small. About 72% of those interviewed encompassed less than three acres. Those utilizing a larger area were the four largest parks, sizes 45, 70, 83, and 135. The other ten ran from one acre for the smaller 3 and 8 sizes and 2-3 acres for the others. This may indicate a practice of cramming more and more spaces into the same area, yet size of the park does not correlate with age. Only two parks sizes 45 and 135 reported owning land which was undeveloped. This must be interpreted care-

45 See Park Dealer's Survey
fully because obviously a park of one acre and three trailers can further develop. However, these two parks are the only ones that have the intention and plans for further development. They constitute a rough measure of the extent to which present competition is able to expand its facilities.

Densities are often difficult to assess but are expressed as the number of sites per acre, including roads, etc. Using the total developed acres reported and the park sizes, densities were calculated. The densities calculated were rough estimates as land areas in some cases had to be estimated by the interviewer. However, parks generally ranged density from three to 14 sites per acre. The smaller parks tend to have lower densities except for parks of size 45 and 70 which were seven sites per acre. In broad terms, however, larger parks tend to be more dense. This is a further indication of the practice of increasing returns by crowding more spaces on the same acreage.

As to lot size, rather dubious results were obtained. Most park operators reported that they did not know lot dimensions. Thus, the results to this question cannot be assigned any confidence. However, there are, of the 432 spaces represented by those parks sampled, about 142 or about 30% under 60' in length. It is a factor of length more than width in lot size which can cause obsolescence. An extra two feet of trailer width causes much less problem than 10 or 20 extra feet in length. As was discussed, many trailers
being sold are in excess of 60'.

The rent for these lots averages $30 per month with little variation. The lowest price is $25 per month charged by 14.2% of the parks; the high was $40 per month charged by 14.2% of the parks. However, one of these parks only offers nine spaces of 135 for $40. These are for double wides. Considering only single unit mobile home lots one park of the 14 or 7.1% charges $40 per month. In some cases there may be an extra charge for cable T.V. or for additional persons, but disregarding these extras, the normal price is $30 per month.

The renting of trailers by mobile home parks is a rather significant factor. To the extent this practice is employed the actual number of sites supplied to accommodate mobile home owners are overestimated. But it also brings to light a source of revenue to the operator, indicates a need for rental units, and indicates the willingness of renters to live in a mobile home dwelling. A park operator can expand his investment by purchasing trailers but this deletes trailer parking space. Forty-three per cent of the parks reported renting trailers. It is not intended that one should believe the number of trailers being rented is high, but it is significant that this practice is prevalent.

Related to the above practice of renting trailers is the vacancy rate in local parks. One hundred percent

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46See also Exhibit III, Chapter 1.
of the parks reported a "low" vacancy rate or none at all. Reference to Exhibit V reveals a 95% confidence on the 100% at approximately ± .05%. Unanimously, park operators reported vacancies were of too short a duration to be bothered with. Some reported informally that their vacancy rate existed solely because of their selectivity in choosing tenants; the criteria often involved pets or other management policies. This low vacancy rate is a primary indicator of the local need for additional mobile home parks.

The section of the survey dealing with utilities was intended to evaluate the extent of utility service which existing parks offer their tenants in Missoula. It was discovered that 100% of the parks supply natural gas for fuel and 100% supply 220-V electrical service. However, none of the parks provide centralized electricity. Subsequent discussions by the researcher with the Montana Power Company found this method of power distribution impractical. It involves complicated negotiations with the rate-setting agencies.

All parks interviewed except one, or about 93%, reported that they provide T.V. cable. Most of the parks charged extra for cable T.V., but 35.7% include it free with the rent. It was discovered that only 21.4% had a recreation building available to the tenants. Thus, playgrounds and tenant recreation are not emphasized in the Missoula market.

Laundries are a potential revenue source to the mobile home park. Even though it seems reasonable that
larger parks should have more laundry facilities this is not necessarily the case; 71.4% reported having some laundry facilities. This usually amounts to a couple of washers and dryers—often only standard household machines. Only three of the parks had more than three washers. Park size 45 had ten washers, which was the largest number. This is on account of considerable trade from outside the park as this particular laundromat is located on a main thoroughfare. The 135-site park had eight washers and park size 83 had five. Each of these places supplies two fewer dryers than washers. Furthermore, of the four parks without laundry facilities only one had a neighboring facility available. Consequently, some laundry facilities are necessary but the demand for these facilities within a park is rather limited.

Management policies have a bearing on potential competitive conditions and thus upon the new park's policies. One hundred percent of the parks accept children. To reiterate, only 14.2% supply playgrounds. This indicates a competitive advantage of providing playgrounds. The practice of charging extra for more than two people occurs; 28.5% reported that they have such a policy. Thus while children are always permitted there may be an extra charge attached to their acceptance and few provisions designed into the park for their benefit. Since vacancies are near zero might not suffer from posing an extra charge for more than two people, but not charging extra and providing facilities for the children can be utilized as another
competitive advantage if necessary.

Many people seem concerned with the policy of accepting pets. We defined pets to be larger animals such as dogs and cats. It was found that 42.8% reported that they do not allow pets. Furthermore, of those parks which do, one requires pets to be on leash, one forbids cats but not dogs, and the other dogs but not cats. All in all, 57% have either complete prohibition or limitations regarding pets. If the lots are fenced, the annoyance of pets can be limited, and the acceptance of pets can then offer another competitive advantage.

One occasionally reads of parks which have different areas designed for different tenant types. Usually the division is on the basis of whether the people have children or not. The sections for families with children are called "adult" sections. This practice is not prevalent in Missoula. Only one park of size 10 or just over 7% of those interviewed reported this practice, and 100% reported that their tenants were of a cross section of retired, students, and working people. This policy can involve complications such as moving a party when their status changes. Thus, since this policy is not widely used in this market, it is not necessary to include it in our comparative strategy.

The next set of information involves the design of existing parks. If existing parks are predominantly unkept looking with little design and poor residential quali-
ties such as landscaping, paved streets, sidewalks, etc., they neither adequately contribute to the social need for housing nor do they offer any competitive threat in this area. A surprisingly few parks require that trailers be skirted. There are few things which detract more from a park's appearance than unskirted trailers, yet only 35.7% of the parks require skirting. The yard can somewhat make up for a lack of skirting if attractive, and privacy is always insured by fencing, yet only 28.5% of the parks supply fencing. The lack of these two elements indicates existing parks generally have a poor appearance. It is recommended that skirting be required as a matter of policy and fencing for all lots be supplied by the park.

The condition of streets and walks also does much to distinguish the poor from the quality trailer environment. However, in the Missoula market, one of the few positive park attributes is that the streets are wide enough to permit on-street parking of vehicles in all parks. Only 14.2% of the parks have curbing, 21.4% have paved streets, and 35.7% have sidewalks. In short, improvements such as these are not frequent. The layout of the streets and the arrangement of the lots display a great lack of imagination. One hundred percent of the parks have a gridiron street design and 100% either place trailers perpendicular or at a slight right angle to the road. No true curvilinear or cul-de-sac street arrange-
ments were found, nor were any cluster or common green lot arrangements discovered. These are attributes of all modern well-designed subdivisions and their inclusion is recommended.

Landscaping is another residential quality which is lacking, and was investigated as to its quantity and quality in existing parks. Only 14.2% or two parks were described as having an abundant quantity of landscaping. Both of these were older parks built among trees which pre-date the park. The majority of parks or 57% were described as having an average amount of landscaping; 21.4% as having no landscaping.

The quality of landscaping for each park was judged excellent, good, fair, or poor; 35.7% were judged good, 42.8% fair, and 21.4% poor. None were considered excellent. As a summary, the landscaping which exists in Missoula's mobile home parks is generally average in quantity and quality. Nothing exists which could be termed beautiful. Thus, it is recommended that every effort be made to include maximum landscaping both in terms of quality and quantity. This will create beauty and contribute more than any single factor to the parks' residential appeal.

The final consideration was the entrance. Only two parks, or 14.2%, had any discernible entrance whatsoever. These were judged to be attractive. The proposed park should have a definite entrance which is attractive. This
will cause the residents to identify with the park in the event the above features are also included.

In summary, the parks are designed for maximum density, utilizing gridiron roads, no common greens, etc. The "extra" area in low density parks is nonfunctional. The space is simply vacant. Most parks are clean but there is no conscious effort to supply the mobile home owner with a residential environment such as can be found in the typical subdivision. One park of size 45 was judged the best park available in this regard. It is of gridiron design, has large lots (401 x 80'), paved streets, nice lawns, skirting, no fencing, no trees. It is plain, clean, uncluttered and somewhat attractive. It also extracts the highest rent--$40 per month. The lack in supply of mobile home parks has been pointed out locally by such indicators as the low vacancy rate, and since the nicer parks are receiving the highest rent, a demand for quality parks is indicated.

PARK RESIDENT'S SURVEY

A third survey was conducted covering the park residents, an example of which is included in the appendix. Proportions and corresponding confidence limits are presented in Exhibit VI. The purpose of the survey was to gain information about the needs and desires of the mobile home park resident. In all, 52 residents were questioned.
## Exhibit VI

**PARK RESIDENTS CONFIDENCE LIMITS - 95%**

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<tr>
<th>No. Responses out of 56</th>
<th>Equivalent Proportion</th>
<th>Confidence Limits $^+$</th>
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<tr>
<td>21</td>
<td>0.37500</td>
<td>0.12671</td>
</tr>
<tr>
<td>Of 52</td>
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<td></td>
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<td>3</td>
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<td>12</td>
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<td>46</td>
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This might appear too small a sample if total registrations were 1667 in 1969. However, the small sample is justified on two accounts. First, the results were very consistent. Also, due to the method of selection, the 52 questionnaires represent the total population very adequately. All park sizes were systematically represented, and selection was at random from each park size group. Consequently, the sample should be adequate.

The park resident's questionnaire was designed to be filled out by the resident and was not an interview. Residents from the same parks as were given the park operator's survey were selected. The initial intention was to select four people from each of these parks. However, in the case of two of the smaller parks this was not possible. People were either not home or refused co-operation. So, extra questionnaires were taken in other parks to correct the deficiency.

The four residents in each park were selected in a random manner as far as possible. Since the questionnaires were given during the day many people were not home, and there were a few who refused to fill out the questionnaire form. When this was the case the questionnaire administrator simply selected another resident in the same park when possible.

It has previously been estimated 70% of the sites available are over 60' long or more. There is no immediate
threat of existing site obsolescence because of longer trailers but the trend is in this direction.

The mobile home dealer's survey pointed out that a high percentage of new home purchases include a trade-in. One dealer said people trade up when they get enough equity in their present mobile home for down payment in a new one. Apparently, this takes from five to seven years; as the dealer's survey illustrates the average age of trade-ins to be five to seven years. Thus, homes of the 1965 vintage or older are prime trade-in material. Adjusting the figures to eliminate those people renting trailers, 46% reported homes of the year 1965 or before. There seems to be a significant potential for new mobile home sales due to trading up. When the person buys a new mobile home, it will likely be larger than his old one, and it is at this time that he is most likely to move to a new park. Since replacement sales as well as first purchase sales can contribute to filling up a new park, the possibility of filling 100 spaces within one year is good.

When mobile home parks are discussed there is always the criticism that they put a strain on the school systems by suddenly springing up and overloading the local school. If there are a large number of children of school age this is a valid criticism. Furthermore, if this is true a park should be designed with children in mind. The 52 people questioned reported a total of 56
children living at home. This is 1.08 children per mobile home. However, 37.5 reported no children. Also, of the 56 children 20 or 37.5% were of school age (six years and over). If there are two parents in each family the average size becomes 3.08. This indicates mobile home families in Missoula are larger than the national average of 2.49 persons. And, since there are more children, play areas must be considered in park design. Parks with curvilinear or cul-de-sac streets are necessary for their safety.

In order to determine mobility characteristics of Missoula mobile home residents, we asked questions concerning the number of years the person lived consecutively in mobile homes, the number of parks lived in during this time, and the number of years in the present park. The average number of parks lived in during this period was 1.9. Dividing the average years in mobile homes by the average number of parks reveals that people stay at the same place about 1.8 years. Now if the average time in the present park of 2.2 years is compared, it seems that people are becoming less mobile.

About half of the people (51.9%) reported they live in a mobile home because it costs less; 38.4% indicate they live in one because it is easier to move. The

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Mobile Homes Manufactures' Association, Flash Facts on Mobile Homes, (Chicago: Mobile Homes Manufactures' Association), June 1969, p. 4.
remaining people voiced less upkeep as their reason. Thus, cost is the most important factor, but many still are attracted to the easy mobility of mobile homes.

Of mobile home residents, 26.9% were 24 and under; 34.5% were 25 - 34, 23%, 35 - 54, and only 9.5% 55 - 64, and only 5.7 over 65. The conclusion is, then, that we have few retired people and predominantly a cross section of working people who are rather evenly distributed as to age under 54 years. These people normally earn incomes under $10,000 per year; 48.0% earn under $7,000; 46.1% earn $7,000-$10,000, and only 5.7% over $10,000.

The results of the last section of the survey proved to be the most interesting. The literature on mobile home parks discusses many park qualities which are deemed important by the mobile home resident. These qualities were listed and discussed informally with a number of mobile home residents to determine which seemed most important to people of this area. It was found, for example, that facilities catering to the older people like organization of card clubs was unimportant. The result was a list of nine items. The individuals surveyed were asked to rank these items in order of their preference. That item felt to be most important was ranked first, etc. Then the results were tabulated on a chart listing the nine variables across the top and the 52 judges down the side. The ranking for each judge was entered and a matrix
was formed. The procedure simply involved adding the totals for each horizontal column. The variable with the smallest total is then judged to be more important, etc.

The residents judged the nine items in the following order where the order runs from most important to least important.

1. Privacy
2. Lot size
3. Low cost
4. Landscaping
5. Paved streets
6. Convenience to work, school, shopping
7. Extra storage space
8. Allowance of larger pets
9. Recreation facilities.
Now that the items are ranked it is necessary to determine a measure of confidence with this result. This was done by first calculating a coefficient of concordance which indicates the degree of agreement among the judges. The coefficient is bounded and runs from 0 to 1; 0 being disagreement and 1 being total agreement. Then testing the hypotheses $H_0: W = 0, H_1: W > 0$ at a level of significance of $\alpha = .05$ will reveal with 95% confidence whether the coefficient of concordance is significantly different from 0.

The following calculations were necessary:

$$\hat{\vartheta}_{\text{max}} = \frac{M^2 (N^3 - N)}{12} \text{ where } M = 52 \text{ judges}$$

$$\hat{\vartheta}_{\text{max}} = 162,240$$

$$\text{rank sum} = \frac{M (N + 1)}{2} = 250$$

$$\hat{\vartheta} = E \left( \text{observed value-rank sum} \right)^2 \text{ where observed value = the horizontal column totals from the matrix}$$

$$\hat{\vartheta} = 63,862$$

$$W = \frac{\hat{\vartheta}}{\hat{\vartheta}_{\text{max}}} \text{ where } W=\text{coefficient of concordance bounded (0-1)}$$

$$W = .39362672$$

$$W* = \frac{\hat{\vartheta} - 1}{\hat{\vartheta}_{\text{max}} - 2} = .39362541$$
W gives a measurement of agreement among the judges. $W^*$ is used to conduct the hypothesis test. The test employed is the $F$ test.

$$F = \frac{(M - 1) W^*}{1 - W^*}$$

$$= 33.10640$$

This value must be compared with a tabulated value for $F$ at $\gamma_1$ and $\gamma_2$. If this calculated value for $F$ is larger than the tabled value we will reject the hypothesis $H_0: W = 0$ and accept $H_1: W > 0$. However, in order to find the tabled value, $\gamma_1$ and $\gamma_2$ must be calculated. Since they result in decimals they will be rounded up.

$$\gamma_1 = (N - 1) - 2/M$$

$$= 7.96154$$

$$= 8$$

$$\gamma_2 = (M - 1)(N - 1) - 2/M$$

$$= 407.96156$$

$$= 408$$

The tabled value for $F$ at $\gamma_1 = 8$, $\gamma_2 = 408$ is 1.96 for 95% confidence and 2.55 for 99% confidence. Thus, we reject $H_0$ and accept $W$ as being significantly different from 0. The results appear valid, and the list is representative of the resident's desires.

These surveys, when viewed together, illustrate the demand for parks in Missoula. They furthermore describe
the needs of the resident in terms of facilities for children, laundromats, and extent of utilities. Also, they describe what type of people in terms of age, income, mobility, etc. inhabit the local parks. Finally, they point out the desires of the residents.
CHAPTER III

CONSTRUCTION OF THE MOBILE HOME PARK

Before the investor can determine the profitability of investing in the construction of the mobile home park, the local public attitude toward mobile home parks must be reviewed. If the public is adverse to the placement of parks in their communities, the investor will be effectively blocked in his attempts by zoning regulations. Traditionally there has been a negative sentiment toward all parks, but there are some indications that this attitude is changing. The Mobile Homes Manufacturers' Association and the Trailer Coach Association have spent a great deal of energy dealing with zoning problems. They will, upon request and for a fee, assist prospective investors in planning and presenting zoning proposals to local city planners and zoning commissions. These proposals usually involve actions directed at obtaining zoning variances or changes in the existing zoning ordinances.

Their past record has been reasonably successful and is improving because of recognition of the growing demand for mobile home parks on the part of city planners. John Martin, executive director of the Mobile Homes Manufacturers Association, reports "In 1967, we had a 40% batting average with planning commissions; in 1969, rulings ran 75% to 80% in our favor."48 The trend seems to be

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toward acceptance of mobile home living.

A review of the suggestion for presenting proposals to planning commissions by the MHMA indicates that the parks presented are large (100 unit and over), low density, residentially designed parks. Consequently, the parks presented are large and expensive to construct. Even with this successful history of combating zoning with quality parks, the MHMA and TCA suggest avoidance of zoning conflicts if at all possible. This suggestion would be even more applicable if attempting to construct a smaller less elaborate park. There are two zoning bodies in Missoula—city and county. However, in the Missoula area the zoning element should not be of importance if the consideration is to build a large park in excess of ten acres. The most evident reason is a lack of suitable areas in excess of ten acres available within the scope of the zoning laws either city or county. County zoning presently covers a very limited amount of area; principally East Missoula, Orchard Homes, and Target Range. As will be pointed out, a large, quality park will need a minimum of 13 acres but preferably 17 acres, plus extra land into which future expansion is possible. No such possible tracts of land have been found within the reach of these zoning regulations.

The smaller park may run into conflict. There is a proposed city ordinance to be recommended for approval in the near future which states, "The minimum site size
for a mobile home park shall be ten (10) acres."49 This leaves us with a set situation. If we were to build within the jurisdiction of zoning laws we should anticipate utilizing at minimum, ten acres, and since this would necessitate purchase of land which is presently utilized, the only practical approach is to acquire land outside of zoning ordinance jurisdiction.

**SMALL VS. LARGE**

At this stage the investor must make a decision. He must decide whether he wishes to simply maximize the return on his investment or whether he has other considerations such as permanence of investment, flexibility or ability to expand the investment, and public image.

The small trailer park should be logically most profitable. Similar to the tenant slum, a small trailer park even if built with high density and few services may fill up because of the high demand pressures. It also stands to reason that to place as many trailers as possible on as small a parcel of ground as possible should show a high return on investment.

However, an investment of this nature will carry a high degree of risk. If a large park is built which offers:

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49 Planning Board Staff, Ordinance No. , City of Missoula, Montana, Mobile Home Park Ordinance. (Proposed). (Missoula: Planning Board Staff, 1969, p. IV-2.)
the individual a suitable, livable environment, comparable to conventional housing the most desirable tenants will be attracted away from the less attractive parks. As a consequence, the crowded park will be left empty, or with the least desirable tenants.

The small park lacks flexibility. Once the park is filled the investment is stagnant. The larger park on the other hand when filled or when partly filled will offer a sizable potential market for other investment opportunities, i.e., grocery store, service station, etc., depending on how large—a small shopping center may be feasible.

Furthermore, in the coming era of "environmentalism" and "consumerism" the small nonresidential park might well be forced out of business as unsuitable living environment.

The larger low density park represents the soundest mobile home park investment. Building and Loan Associations are looking for mobile home parks to finance, but they are interested only in large projects with enough ground that the park can be built in phases of, say, 100 units. They recognize the flexibility of the large park and find park loans of both low risk and satisfactory profit. But they will not fund small parks.  

The small parks may have a place. However, the operation should be recognized as limited and risky in terms of future social and monetary attitudes. It is for this reason that larger parks are recommended.

LOCATION

The first step is to select a suitable location. Space is highly important to the trailer dweller. Privacy and lot size were ranked the two most important elements by Missoula residents. The two are not necessarily independent. Thus, since they were both ranked first and second, respectively, the ranking seems consistent. This attitude is evidently widely held in other geographic areas as is evidenced by the following professionally designed mobile home park plan. Density on the enclosed plan runs eight spaces per acre which includes space for roads, utility buildings, etc. The Mobile Homes Manufacturers Association states, "Sound planning will probably result in no more than 8 - 9 sites per gross acre (including streets, sidewalks, utility buildings, recreation areas, etc.)" 52

51 Additional layouts are included in the appendix to display what types of designs are being employed throughout the nation.

This is considered low density and will permit large lot sizes, hence a degree of privacy. Consequently, for 100 trailers we will need at least 13 acres initially for a density of eight sites per acre. The Trailer Coach Association agrees with these thoughts and reports:

It has been found that ten acres would be the minimum practical size, although parks built on smaller parcels have been very successful. Sizes of 20 acres or more are preferred. Level, well-drained land is best, although many parks have been constructed on slightly rolling hillsides and bluff land.

This would leave no excess for expansion. This low density will logically be more expensive per unit because the land cost must be borne by fewer units. If density can be increased, unit costs could be lowered. It is suggested that a buffer zone could be designed for modular apartments to support the low density trailer park. This, of course, would require more land. The sectionalized development and assembly methods shown on the next pages exemplify what is possible. Thus, extra acres would be necessary, the amount of which would depend on the extent of the apartment project. However, this is another area which could be further researched and the inclusion of apartment complexes will not be a part of this study.

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53 David F. Lyon, "Mobile Home Park Locations Needed in the West Due to Widespread Acceptance of Mobile Homes," reprinted from California Real Estate Magazine distributed by Trailer Coach Association, 1969, p. 1
EXHIBIT VIII

EXAMPLE OF MODULAR APARTMENTS
EXHIBIT IX

ASSEMBLY TECHNIQUE FOR MODULAR APARTMENT DWELLINGS
All in all, long-range plans should eye a minimum of 40 acres. The project should at least be able to begin with 13 to 17 acres and have the ability to acquire another 16 - 30 acres for future expansion. The initial 16 acres should permit 100 sites at the selected density. As demand increases more sites can be added, preferably in increments of 50 - 100 sites, and, as the park population grows land must also be available for park resident-directed concessions—grocery store, etc.

There are, however, a number of requisites for a suitable park. The first, which has already been discussed, is that the parcel must be large enough to allow for future expansion. Since convenience to work, shopping and schools is indicated by the residents' survey as sixth of nine preference levels, it is only moderately important to the resident. This will allow a park to be successful in outlying areas. It would seem that west of town in the area along Mullan Road would be the best location. As has previously been contended, the actual acquisition of land is largely a function of individual influence rather than availability for purchase. Furthermore, David F. Lyon park development director for the Trailer Coach Association, states that parks should be located near "Fringe areas of cities, suburban communities where population growth is forecasted, and where employment and economic conditions are
favorably indicated. Thus, a second feature of potential site location which guides the selection of such a fringe area is the potential for appreciation in land value. It has been said about business locations that "The location plus land appreciation plus income potential minus cost equals desirability." The potential for capital appreciation is an important consideration in any investment decision. In the case of mobile home parks, land appreciation has been suggested as a primary reason for their construction from an investment point of view.

"...comparatively rapid depreciation and writeoff has allowed for development of reasonably large tracts of land being placed in an income-producing position. During an inflationary period while land values have increased to a point where the constructed asset itself could be destroyed in order to place the land to a higher use; this providing tax-sheltered income during the holding period involved."

Thus, land can be held and will provide tax sheltered income until the opportunity to sell at a capital gain arrives. It logically follows that land with appreciation potential should be in the path of future growth. The area

54 Ibid.


between Mullan Road and Waldorf-Hoerner Paper Mill is large, generally flat, vacant, and fits the appreciation potential criteria better than any other area in this region. The factors involved are: First, the land is presently semi-desirable because of the pollution problem with the mill. Second, growth is already moving in that area in spite of the pollution situation. Third, the seventies will be the decade of environmentalism. The people will demand in the future as they are demanding now but with more momentum that the quality of our air and water be restored. It is recognized that our industrial progress is but a false god if it robs us of health and a suitable living environment. In short, within the decade the mill's pollution problem will by necessity be solved. When this occurs this area of the Missoula valley will become extremely desirable and expansion will move swiftly in that direction.

Thus, a large parcel of land in this region, while producing an income, should become extremely valuable. The investor could then step out in front of growth, build again, move his tenants to a new park, liquidate the old park, and begin anew. This process has been done successfully in other areas and can be done successfully here. Secondarily, the presence of the park, if of residential design, can have the effect of increasing the area's land value.
A third feature concerns utilities. The land selected must have a proximity to utilities. Included in this category are roads or main traffic arterials, electricity, natural gas, sewer lines, T.V. cable, etc. There is no immediate problem with proximity to traffic arterials in the area. Mullan Road runs through the center of the area and the old Highway 10 bounds the northern edge. Reserve Street will be put through from I - 90, south to Highway 93. In the event the proposed park was proximate to this route—travel trailer parking could be developed on vacant "extra" space as a side line.

Electricity also is no problem. The T.V. cable is in the area and can be brought in with no problem. Natural gas lines feed the paper mill and are accessible. However, sewage may be a problem. In conversation with a local contractor, the researcher was informed that a private treatment plant was feasible for the area. Water will have to be supplied from a well but there should be no Health Department problems with the well and sewer being too close by virtue of the size of the proposed park. They can be adequately separated. All-in-all, the supply of utilities is favorable.

The final consideration in selecting the location is cost. It would be impossible to assign an actual cost to even a distinct parcel of land without serious heart-to-heart negotiations. However, as a guide the Trailer Coach
Association suggests: 57

The land must be reasonably priced. $2,000 to $10,000 per acre is desirable. $19,000 per acre is considered about the maximum cost of land on which a park can be built and still provide an acceptable return. Some parks have been built on land costing more, but these are usually located in resort areas where commensurately high space rentals can be charged. Several parks have been built on higher priced land on a long-term lease basis.

The last suggestion if utilized would, of course, destroy any potential for land appreciation for the park owner-investor. This would remove a great potential return from the project and thus would not be advisable. The cost range $2,000 - $10,000 does not seem out of reason for this area especially now as its desirability is still low. According to realtors in Missoula, tracts in this area have been available at times for $1,000 - $1,500 per acre.

In conclusion, these guidelines provide a framework of reference into which the proposed area fits very suitably.

DESIGN-SITE PLANNING AND ENGINEERING

Once a demand has been established, zoning reviewed, and finally a site with the necessary qualities secured; the investor can proceed with plans to build. This step

57 Lyon, op.cit., p. 1.
is critical as it will involve the step in which cost decisions are the most important.

The design must conform to the particular piece of land selected. In this regard, a qualified site planning engineer with good experience background should be engaged to prepare the final design. However, the designer will follow the investor's requests and again there are considerations which must be remembered in developing these requests. Essentially the park facilities and design must be residential and conform to the market. The following procedure will be to cover the important areas of consideration in design relating them to the surveys and making design proposals. Then costs can be evaluated for a park with the described characteristics.

Robert Katz of the University of Illinois' Small Homes Council states a basic postulate: 58

If buildings are arranged in arbitrary grid fashion, if views are ignored, and land is stripped of vegetation, this is not just bad site planning, it is no site planning.

The grid fashion of residential design has been universally rejected by professional planners yet it exists in 100% of Missoula parks. One author comments, "regeneration of design in the old grid pattern is passe, and in its place

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are attractive, curvilinear-designed parks with open space that become a credit to any community." Another engineer comments, "grid-iron street patterns are always monotonous and unsafe." The safety factor, of course, is an important consideration. But, there are three reasons for using a grid pattern:

1) If planned lines for future streets have been established and can't be changed.

2) If community is of little growth, and due to a lack of planning present streets will be extended.

3) If the parcel of land to be developed is small and rectangular, and the necessity for low cost requires maximum lot count.

It can be seen from these three criteria for using the grid pattern that for a larger park of the type proposed the grid pattern is to be avoided.

Another expensive but important factor concerning streets is paving. The survey points out the low incidence

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61 Ibid., pp. 60-78.
of paved streets in Missoula's parks. Paved streets were listed as fifth of the nine preference items, but to the investor streets are of further importance. Pavement is essential for a residential atmosphere, it keeps the park cleaner and does wonders for the park's appearance. There is a striking difference between the park with abundant quality landscaping and paved streets and the trailer camp without.

Most streets in Missoula's parks while not paved are wide enough for two-car traffic and on street parking. As a guide to street sizes William J. Casey suggests:

Street entrances and collector streets where parking is permitted on both sides should have a minimum width of 36 feet. Interior streets where no parking is permitted should be 22 feet. The widths can be reduced by two feet in all cases where a sidewalk is provided. Cul-de-sacs should have a minimum turning circle of 80 feet.

Sidewalks and curbing are not frequent in Missoula parks. Their inclusion is necessary for residential quality and can offer a great competitive advantage.

Robert Katz suggests that space be treated as a system utilizing "...cluster development, the common green, greenways, super-blocks, and planned unit development." All these techniques intend to have some land pooled for

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63Robinson, op.cit., p. 6.
communal or common purposes, and such techniques are not existent in present Missoula parks.

Consequently, the park layout should be commensurate with the land. Every endeavor should be made to take advantage of any foliage and the terrain in order to produce the most aesthetic design. If the parcel of land is rather barren, as is much of the proposed area, proper landscaping must be included in the plans. Referring to the survey this matter of landscaping is important to the resident. Landscaping ranked fourth of nine preferences. Furthermore, the amount of landscaping in existing parks is generally no better than average. The quality of landscaping was judged from good to poor with no parks having enough quality to be termed excellent. Thus, the resident's desire for landscaping is not being adequately fulfilled. Furthermore, landscaping enhances the park's appearance to outsiders and passers-by and thus communicates the park's image. This image is strengthened by the park's entrance. This is where first and lasting impressions are made. If the entrance is beautifully designed the resident can be made to feel at home when he first enters the park, rather than when he enters his own driveway. The survey points out the high incidence of parks with drab entrances—85.7%. Furthermore, most of these really have no entrances at all. For the benefits that landscaping offers in public image, tenant satisfaction, and quality of environment for the
resident, it must be generously included in park design. There is only one comparison between a beautiful park rich in vegetation and a bleak park built on barren ground—landscaping.

An important element in park construction and design are utilities and these systems must be designed by competent engineers. It has been noted that access to utilities in the target area is relatively favorable. It should be noted that all existing parks provide natural gas, 220-volt electricity and T.V. cable. Thus, these must be included in order to be competitive.

It must be noted that modern development demands that all utilities, including T.V. cable, electricity, and telephone be installed underground. This is an important factor which enhances the park's appearance. Once overhead installations are made they are extremely difficult to change. Consequently, the underground installations must be made in the beginning.

Playgrounds seem warranted because of the number of pre-school children in this area. The location of and corresponding size might well be fitted into the park layout as the topography demands. The important point is to include some area or areas for the children. Also, since only 21.4% of the parks in Missoula offer facilities for children, this park asset should have strong drawing power.

Another similar facility is the recreation building.
In the Missoula market, such facilities are found in only 14.2% of the parks. Furthermore, recreation facilities were listed as the last item in the list of preference. It is the conclusion of the research that these facilities could be omitted if costs associated with them are found to be prohibitive.

The market created by the mobile home park must not be overlooked in park design. The situation creates a captive market for such activities as laundromat, small scale grocery offering necessities, and automatic auto-wash. Of course, as the park grows this market improves. This further highlights the desirability of extra space into which to expand. As far as these related business activities are concerned, the investor can easily see more benefit from one large park than from a number of small ones.

The survey points out the surprisingly high percentage of people with washers and dryers. Thus, even though some laundry facilities are necessary they needn't be extensive. The 135-site park in Missoula has six dryers and ten washers. Thus, we should plan to begin initially with a similar laundromat capacity. However, it must be remembered that expansion is expected and this will require expansion of the laundromat.

It is suggested that the office, living quarters of the manager, the laundromat, and those recreation faci-
lities included be consolidated in one building. This is less expensive to build and control.

This brings the study to a final design consideration--lot size. It has already been discussed that the future trailer will be longer and somewhat wider. Length is the most crucial aspect, as a park cannot fit in a trailer that is too long as it can one which is too wide. Adequately large lots should never have this problem. Lots should be at least 80' deep and, if at all possible, 90' - 100'. Width should be in excess of 30', preferably over 40'. This would place lot sizes at about 3,000 square feet. In regard to this, Richard C. Mitchell from the Land Development Division of the Mobile Homes Manufacturers Association says,\(^{64}\)

Three thousand square feet should be considered as a **minimum** lot size for today's mobile home park. Potential customers may judge the quality of the park by the size of space. Parks which want quality pull should aim for sizes considerably greater than 3,000 square feet.

In conclusion, one should not plan 100 lots of a certain size. This produces the gridiron layout so prevalent in this area. The following summarizes the question of lot size very aptly:\(^{65}\)

To help prevent premature obsolescence, we re-

---

\(^{64}\) Mitchell, *op.cit.*, p. 2.

\(^{65}\) Ibid., p. 1.
commend flexibility in design. Lots should not be labeled 40 by 80, 50 by 100, or anything of that sort; you will want some of them to accommodate long single units and some of them should be shaped for double wides with a proportional larger surrounding area.

It must be remembered, however, the Missoula double wide market while not nonexistent is not extensive either.

These are the important areas of consideration in building a mobile home park in Missoula. Bear in mind the high percentage of residents (69.3%) reporting that they felt there was a lack of good parks. The next chapter will discuss and evaluate the costs involved in providing a park with the previously described qualities.
CHAPTER IV

CAN THE PARK OFFER A SUITABLE RETURN AT A COST THE RESIDENT CAN AFFORD

DEVELOPMENT COST

The question remains as to whether the previously described qualities can be included in a mobile home park, fit the local mobile home resident's pocketbook, and still give the investor a suitable return. To answer this, costs, expenses and return-on-investment must be calculated and analysed. In evaluating project cost, it must be remembered that without a specific parcel of land and a specific project laid out for that land by a professional engineer, and the construction contracts for the project awarded, actual costs cannot be isolated. Yet Exhibit X can serve as a general guideline to costs of development for a 100-site park.

In evaluating these costs the researcher talked with a local contractor who has been active in developing residential subdivisions in Missoula. It was his opinion that to construct the project outlined, the cost would run $2,000 - $2,200 per space, excluding land costs. This would produce a very fine residential environment. Note one inclusion in Exhibit X which was not previously presented—-the swimming pool. This is an unnecessary item to the resident but it is the opinion of this researcher that the
EXHIBIT X

TRAILER COACH ASSOCIATION

AVERAGE CONSTRUCTION COSTS OF IMPROVEMENTS OF

MOBILE HOME PARKS -- SIZE 100 SITES

<table>
<thead>
<tr>
<th>Community Facilities:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>$34,800</td>
</tr>
<tr>
<td>Swimming Pool</td>
<td>5,500</td>
</tr>
<tr>
<td>Recreation facilities</td>
<td>1,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual Site Facilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>1,700</td>
</tr>
<tr>
<td>Excavating, grading &amp; clearing</td>
<td>4,700</td>
</tr>
<tr>
<td>Concrete</td>
<td>14,400</td>
</tr>
<tr>
<td>Asphalt</td>
<td>21,000</td>
</tr>
<tr>
<td>Plumbing &amp; Sewers</td>
<td>42,000</td>
</tr>
<tr>
<td>Electrical Dist. System</td>
<td>31,300</td>
</tr>
<tr>
<td>Fencing</td>
<td>5,600</td>
</tr>
<tr>
<td>Clothes Poles</td>
<td>500</td>
</tr>
<tr>
<td>Mail boxes</td>
<td>450</td>
</tr>
<tr>
<td>Signs</td>
<td>800</td>
</tr>
<tr>
<td>Landscaping</td>
<td>4,900</td>
</tr>
<tr>
<td>Sprinkler systems</td>
<td>1,550</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Construction Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-site construction</td>
<td>10,000</td>
</tr>
<tr>
<td>Building permits</td>
<td>500</td>
</tr>
<tr>
<td>Plans &amp; Supervision</td>
<td>7,900</td>
</tr>
<tr>
<td>Water meter</td>
<td>900</td>
</tr>
<tr>
<td>Temporary utilities &amp; facilities</td>
<td>1,900</td>
</tr>
<tr>
<td>Clean-up</td>
<td>1,000</td>
</tr>
<tr>
<td>Insurance &amp; Bond</td>
<td>1,600</td>
</tr>
<tr>
<td>Provision for contingencies</td>
<td>2,200</td>
</tr>
<tr>
<td>Contractor's profit &amp; overhead</td>
<td>12,100</td>
</tr>
</tbody>
</table>

**TOTAL**                                      **$208,300**

**Per Space**                                   **$2,083**

pool should be included for prestige purposes, if possible.

Consequently, the contractor's estimates generally concur with the Trailer Coach Association (Exhibit X) on development cost. The Mobile Homes Manufacturers' Association also agrees.66

The MHMA's Beitler suggests a rough estimate of $1,500 to $2,000 per homesite—plus land costs. The per site development costs of up to $2,000 includes streets, utilities, the pad (usually a concrete pad on each homesite which supports the home's weight), recreation facilities and other amenities.

Furthermore, Trailer Rancho, a partially owned mobile home and park development company of Travelodge Corporation (the motel firm) reports their average cost at $2,600 per space for 150 spaces—including land.67

These figures all generally range in the $2,000—$2,200 area, and the conservative figure of $2,200 per space will be used as development cost per site. It has previously been pointed out that land in the proposed area should cost $1,000—$1,500 per acre. The average figure of $1,250 will be used. Automotive equipment costing $4,000 and laundry equipment costing $5,000 will be in-

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67Norris Willat, "Mobile Home Parks: They are Proving to be More Than a Transient Phenomenon," Barron's, June 19, 1967, p. 18
cluded. Assuming various densities the cost of the project will result as follows:

<table>
<thead>
<tr>
<th>Density</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres needed for 100 sites</td>
<td>17</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Cost of land @ $1,250/acre</td>
<td>$21,250</td>
<td>$18,750</td>
<td>$16,250</td>
</tr>
<tr>
<td>Improvements @ $2,200/site</td>
<td>$220,000</td>
<td>$220,000</td>
<td>$220,000</td>
</tr>
<tr>
<td>Other equipment:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>automotive</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>laundry</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>TOTAL Investment Cost</td>
<td>$250,250</td>
<td>$247,750</td>
<td>$245,250</td>
</tr>
</tbody>
</table>

Assuming densities 6, 7, and 8 sites per acre, a 20-year mortgage at 10% and $10,000 in working capital, the cash requirement or net investment is:

<table>
<thead>
<tr>
<th>Density</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total investment cost</td>
<td>$250,250</td>
<td>$247,750</td>
<td>$245,250</td>
</tr>
<tr>
<td>Mortgage 70%</td>
<td>175,175</td>
<td>173,425</td>
<td>171,675</td>
</tr>
<tr>
<td>Equity</td>
<td>75,075</td>
<td>74,325</td>
<td>73,575</td>
</tr>
<tr>
<td>Working Capital</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Net investment</td>
<td>$ 85,075</td>
<td>$ 84,325</td>
<td>$ 83,575</td>
</tr>
</tbody>
</table>
EXPENSES AND RETURN-ON-INVESTMENT

In order to compute a return on investment, expenses and revenues must be estimated. It should also be kept in mind that this investment has a 20-year life. At the end of the 20 years all assets except land and working capital will have no value. At this point in time the land is to be converted to a better use because we expect the land value to be too high to warrant a mobile home park. Therefore, at the end of the twentieth year the land will be sold, and since it is too speculative to attach a value 20 years hence on the land, the following calculations will conservatively use a final land value equal to its original cost. The potential for terrific capital gain may exist but because of its speculative nature and in order to show a return based on conservative assumptions this potential will not be included in the figures. It will also be assumed that the operating margin before depreciation will remain constant throughout the period. The investor is in a 30% tax bracket, the debt principal is paid back at the constant rate of $8,759 per year, and a park density is six sites per acre.

The amount of average site rental, of course, directly affects the return on investment. The surveys found that $40 per month was the highest rental in Missoula. But the park charging $40 per month was far superior in residential qualities than any other. It has a density of seven sites per acre, gridiron street pattern, paved streets,
nice lawns and sidewalks. The trailers are set at right angles to the street, the park is clean and attractive for this area. However, the proposed park will have a lower density (six sites per acre), more vegetation and trees, common greens and parks, a swimming pool, other recreation facilities, and a more residential environment. Consequently, it appears that $45 per month is not out of reach for the resident or is not unobtainable in the market. Therefore, it is on the basis of $45 per month site rent that the returns are calculated.

The following is a set of exhibits outlining annual earnings after taxes and annual cash income generated. Beginning with Exhibit XI, Table 1, other income includes laundry revenue estimated to be $2,418. This is based on the survey which indicates 31% of the residents are without washers. If 31 residents spend $1.50 per week, this will result in $2,418. To this figure was added $582 in income from soft drink, cigarette, soap, and related vending machines.

Depreciation is conservatively set at straight line for 20 years. It is recognized that the laundry equipment and automotive equipment should be written off faster but for the sake of simplicity all assets are depreciated at the same rate. Table 2 shows the cash income generated per year and indicates those amounts which will increase or decrease by a constant amount each year. Table 4 shows a
### Table 1
Schedule of Earnings After Tax, Beginning Year One

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from rental, 100 @ $45 assuming a 5% vacancy</td>
<td>$51,300</td>
</tr>
<tr>
<td>Other income</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>TOTAL Income</strong></td>
<td><strong>54,300</strong></td>
</tr>
<tr>
<td><strong>Less : Operating Expenses</strong></td>
<td><strong>(21,453)</strong></td>
</tr>
<tr>
<td>Operating margin (before depreciation)</td>
<td>32,847</td>
</tr>
<tr>
<td>Less depreciation (5% 229,000)</td>
<td>(11,450)</td>
</tr>
<tr>
<td><strong>Less: interest</strong></td>
<td>(17,518) Decreases by $876 per year</td>
</tr>
<tr>
<td><strong>Earnings before taxes</strong></td>
<td>3,879 Increases by $876 per year</td>
</tr>
<tr>
<td>Less Tax at 30%</td>
<td>(1,164) Increases by $263 per year</td>
</tr>
<tr>
<td><strong>Earnings after tax</strong></td>
<td>2,715 Increases by $613 per year</td>
</tr>
</tbody>
</table>
Table 2
Schedule of Cash Flow

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings after tax</td>
<td>$2,715</td>
<td>increases by $613 per year</td>
</tr>
<tr>
<td>Plus annual depreciation</td>
<td>11,450</td>
<td></td>
</tr>
<tr>
<td>Less annual debt principal payment, 5% $175,175</td>
<td>(8,759)</td>
<td></td>
</tr>
<tr>
<td>Cash income</td>
<td>5,406</td>
<td>increases by $613 per year</td>
</tr>
</tbody>
</table>

Table 3
Resulting Returns on Investment of $85,075

<table>
<thead>
<tr>
<th>Description</th>
<th>After Tax</th>
<th>Before Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income return</td>
<td>6.62%</td>
<td>9.45%</td>
</tr>
<tr>
<td>Cash income return</td>
<td>9.72%</td>
<td>13.9%</td>
</tr>
</tbody>
</table>
### Table 4

Schedule of Operating Expenses - 100 Spaces @ $45 each

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management - 10% under $50,000</td>
<td>$5,344</td>
</tr>
<tr>
<td>plus 8% over 50,000</td>
<td></td>
</tr>
<tr>
<td>Wages &amp; payroll taxes - $110/acre plus $10/site</td>
<td>2,870</td>
</tr>
<tr>
<td>Water &amp; utilities - $100/acre plus $18/site</td>
<td>3,500</td>
</tr>
<tr>
<td>Insurance - 1% gross</td>
<td>543</td>
</tr>
<tr>
<td>Taxes and License - $25/site</td>
<td>2,500</td>
</tr>
<tr>
<td>Maintenance &amp; Repair - $100/acre plus $8/site</td>
<td>2,500</td>
</tr>
<tr>
<td>Advertising and Dues - $400 plus $1/site</td>
<td>500</td>
</tr>
<tr>
<td>Legal and Accounting - $300 plus $2/site</td>
<td>500</td>
</tr>
<tr>
<td>Automobile and Mechanical $600 plus $2/site</td>
<td>800</td>
</tr>
<tr>
<td>Office expense - $500 plus $1/site</td>
<td>600</td>
</tr>
<tr>
<td>Supplies and Miscellaneous - $30/acre plus $2/site</td>
<td>710</td>
</tr>
<tr>
<td>Trash removal - $6/site</td>
<td>600</td>
</tr>
<tr>
<td>Other 1% gross</td>
<td>486</td>
</tr>
<tr>
<td><strong>TOTAL Operating Expense</strong></td>
<td><strong>$21,453</strong></td>
</tr>
</tbody>
</table>
EXHIBIT XII

CASH INCOME USING SUM OF THE YEARS DIGITS

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating margin before depreciation</td>
<td>$32,847</td>
<td>$32,847</td>
<td>$32,847</td>
<td>$32,847</td>
<td>$32,847</td>
</tr>
<tr>
<td>Less Depreciation</td>
<td>20,725</td>
<td>19,776</td>
<td>18,735</td>
<td>17,695</td>
<td>16,653</td>
</tr>
<tr>
<td>Earnings before interest &amp; taxes</td>
<td>12,122</td>
<td>13,071</td>
<td>14,112</td>
<td>15,152</td>
<td>16,194</td>
</tr>
<tr>
<td>Less interest</td>
<td>17,517</td>
<td>16,642</td>
<td>15,766</td>
<td>14,900</td>
<td>14,024</td>
</tr>
<tr>
<td>Net operating loss or income</td>
<td>(5,396)</td>
<td>(3,571)</td>
<td>(1,664)</td>
<td>252</td>
<td>2,170</td>
</tr>
<tr>
<td>Less Income Tax @ 30%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Earnings or loss after tax</td>
<td>(5,396)</td>
<td>(3,571)</td>
<td>(1,664)</td>
<td>177</td>
<td>1,519</td>
</tr>
<tr>
<td>Plus depreciation</td>
<td>20,725</td>
<td>19,776</td>
<td>18,735</td>
<td>17,695</td>
<td>16,653</td>
</tr>
<tr>
<td>Less debt principal payment</td>
<td>8,759</td>
<td>8,759</td>
<td>8,759</td>
<td>8,759</td>
<td>8,759</td>
</tr>
<tr>
<td>Cash income</td>
<td>6,570</td>
<td>7,446</td>
<td>8,312</td>
<td>9,113</td>
<td>9,413</td>
</tr>
<tr>
<td>Plus tax benefit from loss</td>
<td>1,619</td>
<td>1,334</td>
<td>499</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL cash income generated *</td>
<td>8,189</td>
<td>8,780</td>
<td>8,811</td>
<td>9,113</td>
<td>9,413</td>
</tr>
</tbody>
</table>

Rate of Return — After taxes 10.7%; before taxes, 15.22%

* This amount increases by $301 annually from year 5 to 20.
breakdown of the operating expenses. These were determined by utilizing a method recommended by William J. Randall, M.A.I., appraiser for the Mobile Home Manufacturers Association.68

The net income stream and cash income stream plus the original cost of the land at year 20 were each discounted back to the net investment of $85,075. The resulting rates of returns were 6.62% for net income and 9.72% for cash flow before taxes. Since these returns represent 70% of the pre-tax rate, the pre-tax return would be 9.46% on net income and 13.9% on cash flow. (See Table 3.)

Since the asset replacement will be minor, most of this cash flow can be taken by the investors. If this is contemplated, the cash flow return on investment proves the most important.

Furthermore, if accelerated depreciation methods are used more income can be sheltered from taxed during the earlier years. Exhibit XII presents calculations using the sum of the years digits methods of depreciating rather than straight line.

When the stream of cash flow generated, plus the original and cost of $21,250 in year 20, are discounted to the original investment of $85,075, the rate of return is

68 Casey, op. cit., p. 545.
10.7%; this is equivalent to a pre-tax rate of 15.22%.
Thus, the 9.72% after tax and 13.9% before tax return calculated with straight line can be increased by using accelerated depreciation.

EVALUATION

This business is not characterized by a great deal of risk, but before too much is said about risk and the rate-of-return presented, the important factor of park management must be briefly discussed. Competent management is a key to reducing risk and maintaining a high rate of return. Since the investor himself may not be the actual manager, adequate measures must be employed to insure good management. The secret here lies in selecting good personnel and good park policy. Park policy can have the dual role of guiding the park manager's decisions and providing competitive advantage. These returns are based on the assumption of sound management by both the investor and park manager.

The terms of business are net cash and cash flow is strong. The demand for mobile home park facilities has been adequately pointed out. There remains, however, one factor not accounted for. As with all businesses there are starting-up costs, and the park can't be expected to fill up immediately. However, in Missoula, with the co-operation of the mobile home dealers, adequate advertising, and
the advent of two new industrial plants which will supply some 400 new jobs in Missoula—the fill-up time should be minor—within one year with proper timing.

Therefore, the risks involved are minimal but are the returns adequate? The Trailer Coach Association sets forth this guideline:69

The TCA surveys suggest that parks with 100-400 spaces should aim for an annual return-on-investment ranging upward with the park size from 15.1% to 18.9% before depreciation.

The statement is somewhat vague but if we interpret it to mean a cash income return-on-investment before tax our figure compares at 15.22%.

A more valuable measure is after tax cash income return-on-investment. Our investors have this money available and it will not necessarily be retained in the business. Thus, if they so wish the cash income can be taken out each year. The return, including tax shelter benefits of the early years losses, is 10.7% after taxes. This assumes a 30% tax rate.

CONCLUSION

The conclusions has not been answered as to whether this is a good investment. The resident can afford $45 but is 10.7% return-on-investment good enough? The risk in-

involved seem to be minimal. The investor can hire a park manager and thus needs to devote a minimum amount of time to the operation himself. The manager is a key factor but provision has been made in the costs and expenses to provide this manager with a home plus over $400 a month salary. This should be very attractive as a man-and-wife operation as the wife could handle the duties of minding the park and the husband can still hold another job.

There are possible construction cost savings by building a large number of sites and properly timing bids. This would allow either less rent or a higher return. The returns given are calculated using reasonably conservative assumptions and should be interpreted as a lower limit. In the event the investor desires an investment which can grow, additional land should be acquired. This could be done with option agreements, purchase, or by involving the land owner in the business. Expansion, as demand permits, can increase the return-on-investment further.

Thus, the mobile home park is an attractive investment. This attraction of course will depend to some degree on the individual investor and the alternative investments open to him. The mobile home park offers a low risk opportunity which demands little of the investor in terms of time, and has good expansion possibilities. This would seem ideal for an individual or corporation with excess profits and a need for safe investment.
Adequate living environment can be supplied to the mobile home resident as a profit. The mobile home as a partial answer to the housing shortage is thus limited only by a lack of investor awareness. If the investor can become aware of the potential profit in the construction of large residential subdivision mobile home parks, we will be one great step closer to adequate housing.
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APPENDIX
DEALER'S QUESTIONNAIRE

1. The number of units sold by year in the past three years?

2. What percent or how many in each year were delivered within Missoula, Lolo, East Missoula, or Bonner?

3. What percent of total sales included a trade-in?

4. What is the average age of trade-ins?

5. How many of the following sizes were sold each year for the past three years?
   - 8' Wide ______
   - 12' Wide ______
   - 14' Wide ______
   - Double-wides ______
   - Expandables ______
PARK OPERATOR'S INTERVIEW FORM

A. General

1. Age of park: ______

2. Number of lots: Permanent ______

3. Will the park accommodate expandable and double-wide mobile homes?
   Yes ______ No ______ How many spaces ______

4. What is the total acreage of the park? ______ acres;
   ______ acres developed for permanent sites;
   ______ for over-night.

5. What are the sizes of lots and corresponding rent?
   ______ lots ______ by ______ @ $ ______
   ______ lots ______ by ______ @ $ ______
   ______ lots ______ by ______ @ $ ______

6. Do you rent trailers? Yes ______ No ______

7. What do you feel your vacancy rate is ______?

B. Utilities

1. Gas: Natural ______ Bottled ______

2. Cable T.V. No. ______; provided with rent ______
   extra charge ______

3. Electric power: Centralized ______; individual meter ______; underground ______;
   overhead ______; 110 volts only ______,
   220 volts ______.
4. Playground: Yes______; No______.

5. Recreation Building: No_____; Yes______ Size______.

6. Laundry Building: No_____; Yes______ Size______.
   a. Number dryers: _____ washers _____ dry clean_____
   b. Capacity dryers: _____ washers _____ dry clean_____
   c. Unowned laundry facility adjacent: Yes____ No_____.

7. Street Construction: Curbs: Yes______; No______.
   Width: Narrow (only room for cars to pass; no side street parking)_____
   Wide_____
   Paved: Yes ______; No _____.

8. Sidewalks: Yes______; No _____.

C. Management Policy

1. Does management permit:
   a. Children: Yes _____; No _____.
   b. Any added charge for "extra people" over two children:
      Yes _____; No _____.
   c. Pets other than fish, birds, etc.:
      Yes _____; No _____.

2. Family section: Yes______; No______.

3. Are residents primarily:
   a. Students_____
   b. Retired persons_____
   c. Cross section_____.
4. Are mobile homes required to be skirted:
   Yes _____; No _____.

5. Does management supply fenced lots?
   Yes _____; No _____.

D. **Design** (to be completed by Interview through observation)

1. Street layout: gridiron _____; curvilinear _____;
   cul-de-sac arrangement _____.

2. Lot arrangement (generally) at right angle
   to road _____; diagonal _____; cluster _____;
   common green _____.

3. Amount of landscaping: abundant _____;
   average _____; none _____.

4. Quality of landscaping: excellent _____;
   good _____; fair _____; poor _____.

5. Entrance: Attractive _____; drab _____.
PARK RESIDENT'S QUESTIONNAIRE

Instructions: We are interested in finding out if it might be possible to offer the mobile home resident a better environment for his trailer. We are interested in knowing something about you and about your feelings toward mobile home parks. So would you please fill in the blank or check the appropriate line in answering the following questions.

1. What size is your mobile home? ___ ft. by ___ ft.
2. What year is your mobile home? ______
3. How many children do you have living at home with you? ______
4. What are their ages? ________________________.
5. How long have you lived in mobile homes since you last changed to mobile home living from apartments, conventional housing, or some other shelter type? ______ years.
6. How many mobile homes have you purchased to live in during this period? ______
7. How many parks have you lived in during this period? ______
8. How long have you lived at this park? ______.
9. Do you have your own washer? Yes ____; No ____.
10. Do you have your own dryer? Yes ____; No ____.
11. Do you feel there are a lack of good parks available: Yes ____; No ____.
12. Do you feel any social discrimination by being a mobile home dweller? Yes _____; No _____.

13. Do you rent your mobile home? Yes _____; No _____.

14. Which of the following is the primary reason you chose to live in a mobile home? (Check the appropriate space.)
   a. _____ It costs less than an apartment or conventional home.
   b. _____ When you move you can easily move and take your house with you.
   c. _____ There is less upkeep and maintenance with a mobile home than with other types of housing.

15. Which age bracket does the head of household fall into? (Check the appropriate space.)
   ________ 20 - 24  ________ 55 - 64
   ________ 25 - 34  ________ over 65
   ________ 35 - 54

16. Please check the income range which the head of household falls into.
   _____ under $7,000
   _____ $7,000 - $10,000
   _____ over $10,000.

17. Read the following list through. Then, concerning the selection of a mobile home park, rank the following in terms of importance to you. They all may be important but number them from one through nine;
number the most important No. 1, the next important, Number 2, etc., the least important to you will be No. 9.

- lot size
- paved streets
- extra storage space (storage sheds, etc. provided)
- landscaping: lawn, trees, etc.
- privacy
- recreation facilities - meeting hall, parks, etc.
- convenience to work, school, shopping
- low cost
- allowance of larger pets (dogs, cats)
### RESULTS

**PARK OPERATOR'S INTERVIEW**

There were 14 responses to each question. These responses are broken down for each question as follows:

1. & 2. **Age of Park & Size**

<table>
<thead>
<tr>
<th>Park Size</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4 years</td>
</tr>
<tr>
<td>8</td>
<td>19 years</td>
</tr>
<tr>
<td>10</td>
<td>6 years</td>
</tr>
<tr>
<td>11</td>
<td>4 years</td>
</tr>
<tr>
<td>18</td>
<td>9 years</td>
</tr>
<tr>
<td>23</td>
<td>20 years</td>
</tr>
<tr>
<td>24</td>
<td>20 years</td>
</tr>
<tr>
<td>28</td>
<td>3 years</td>
</tr>
<tr>
<td>32</td>
<td>12 years</td>
</tr>
<tr>
<td>42</td>
<td>12 years</td>
</tr>
<tr>
<td>45</td>
<td>6 years</td>
</tr>
<tr>
<td>70</td>
<td>8 years</td>
</tr>
<tr>
<td>83</td>
<td>5 years</td>
</tr>
<tr>
<td>135</td>
<td>14 years</td>
</tr>
</tbody>
</table>

3. **Will park accommodate double wides?**

- 4 - yes one park with 2 spaces for doublewides
- 10- no one park with 3 spaces for double wides

Two parks with 9 spaces for double wides

4. **Total Acreage?**

- 2 parks - 1 acre: size 3, 8 site
- 7 parks - 2 acre: size 10, 11, 18, 23, 24, 28, 42 sites
- 1 park - 3 acre: size 23 sites
- 1 park - 5 acre: size 83 sites
1 park - 8 1/3 acre: size 45 sites
1 park - 10 acre: size 70 sites
1 park - 15 acre: size 135 sites

All parks except sizes 45 & 135 sites had no undeveloped land; the former have 2 & 3 extra acres, respectively.

5. **Lot size?**
   Maximum length - 120'; minimum length - 60'
   Maximum width - 40'; minimum width - 30'
   Average rent: $35

6. **Do you rent trailers?**
   8 - yes
   6 - no

7. **What do you feel your vacancy rate is?**
   14 - low

**B. UTILITIES**

1. Natural gas - 14 parks

2. **Cable TV?**
   13 - yes  
   1 - no
   5 provide with rent
   9 do not
3. **Electricity**
   14 - individual meter  
   5 - underground  
   9 - overhead  
   14 - 220

4. **Playground?**
   3 - yes; 11 - no.

5. **Recreation Building?**
   2 - yes; 12 - no.

6. **Laundry facilities?**
   10 - yes; 4 - no
   1 had one dryer, one washer
   2 had one dryer, two washers
   1 had one dryer, three washers
   3 had two dryers, two washers
   1 had three dryers, five washers
   1 had six dryers, eight washers
   1 had six dryers, ten washers.

7. **Streets**
   12 - no curbs; 2 - curbs
   14 - wide streets (room for cars to pass and street parking)
   10 - no paving; three paved, one one-half paved
C. Management Policy

1. Permit --
   Children: 14 - yes
   Extra charge for more than two people:
   4 - yes; 10 - no
   Pets: 8 - yes; 6 - no.

2. Family Section?
   1 - yes; 13 - no.

3. Residents are primarily:
   1 - students (also marked cross section)
   0 - retired persons
   14 - cross section

4. Require skirting?
   5 - yes; 9 - no

5. Does park supply fenced lots?
   5 - yes; 9 - no

D. Design

1. Street layout
   14 - gridiron

2. Lot arrangement
   11 - right-angle; 3 - diagonal
3. **Amount of landscaping (quantity)**

   2 - abundant; 9 - average; 3 - none.

4. **Quality landscaping**

   5 - good; 6 - fair; 3 - poor.

5. **Entrance:**

   2 - attractive; 12 - drab or none at all.
RESULTS
PARK RESIDENTS' SURVEY

1. What size is your mobile home?
   8' wide; length: 1-32', 2-35', 3-40', 1-42', 1-50'
   10'-101' wide; length: 7-50', 2-53', 9-55', 1-60'
   12'-12' wide; length: 2-52', 4-55', 6-60', 5-65', 4-63'
   14'-14' wide; length: 1-60', 1-65', 1-68'
   1 - double-wide, 20' x 60'

2. What year is your mobile home?
   1 - 1955  2 - 1961  3 - 1966
   1 - 1956  4 - 1963  9 - 1967
   2 - 1957  3 - 1964  3 - 1968
   2 - 1959  9 - 1965  9 - 1969
   2 - 1960  2 - 1970

3. How many children do you have living at home with you?
   21 - 0 children  6 - 3 children
   15 - 1 child    2 - 4 children
   8 - 2 children

4. What are their ages?
   20 - 6 years & over, 32 - under 6 years
5. Years in a mobile home?
   Average of 3.50961 years

6. Number of homes lived in during this period?
   6 - none  
   34 - 1 mobile home 
   10 - 2 mobile homes

7. How many parks have you lived in during this period?
   29 - 1 park 
   15 - 2 parks 
   2 - 3 parks 
   1 - 4 parks 
   3 - 5 parks
   Average number of parks were 1.9038.

8. How long have you lived at this park?
   Average of 2.1298 years

9. Do you have your own washer?
   32 - yes; 30 - no

10. Do you have your own dryer?
    24 - yes; 38 - no
11. Do you feel there are a lack of good parks available?
   36 - yes; 16 - no

12. Do you feel any social discrimination by being a mobile home dweller?
   6 - yes; 46 - no

13. Do you rent your mobile home?
   7 - yes; 45 - no

14. Primary reason to live in a mobile home?
   27 - less cost; 20 - easy to move; 5 - less upkeep

15. Age of head of household
   14 - 20 to 24 years
   18 - 25 to 34 years
   12 - 35 to 54 years
   5 - 55 to 64 years
   3 - over 65

16. Income range of head of household?
   25 - under $7,000
   24 - $7,000 - $10,000
   3 - over $10,000
RECOMMENDED SITE PLAN FOR A
MOBILE HOME PARK

GENERAL NOTES
1. All dimensions are approximate and may vary due to surveying or construction.
2. All site lines and access roads are subject to change.
3. All easements and utilities are subject to the approval of the local utility companies.
4. All site plans must be reviewed and approved by the local building department.

MOBILE HOMES MANUFACTURERS ASSOCIATION
LAND DEVELOPMENT DIVISION

Site Development Data
TOTAL AREA: 15.5 acres
NUMBER OF UNITS: 120
DEPARTMENT (each per 5 acre block) 2.5

DRAWN: ______________________
CHECKED: ____________________
a mobile home park

NOTES:

1. CONRAD/ADAMS MODEL HOME SITE.
   THE MODEL HOME SITE IS LOCATED WHERE THE
   DEVELOPMENT'S ENTRY ROAD AND THE HOUSE IS LOCATED.

2. MOUNTAIN'S MODEL HOUSE SITE.
   THE MODEL HOUSE SITE IS LOCATED WHERE THE
   DEVELOPMENT'S ENTRY ROAD AND THE HOUSE IS LOCATED.

3. INDIVIDUAL LOT HOLES MUST BE OF 2' INCHES OF CONCRETE.

4. STREET CUTTING AND SWALE,
   AS STATED ON THE PLAN.

5. WATER SUPPLY AND SEWER,
   AS STATED ON THE PLAN.

6. EACH MODEL HOME STANDS
   ON A FOUNDATION PLUS A CONCRETE "A" BASE, AND IS LOCATED
   WHERE THE DEVELOPMENT'S ENTRY ROAD AND THE HOUSE IS LOCATED.

7. THE GROWTH TRENDS OF
   THE HOUSES ARE SHOWN ON THE PLAN.

8. STREET & SEWER PLANTS,
   AS STATED ON THE PLAN.

9. MISCELLANEOUS ORどのように
   AS STATED ON THE PLAN.

MOBILE HOME MANUFACTURERS ASSOCIATION
LAND DEVELOPMENT DIVISION

MISCELLANEOUS ORどのように

DRAWN BY: [Signature]
DRAWN FOR: [Signature]
SUGGESTED DESIGN FOR
A MOBILE HOME PARK.
LICKISON COUNTY KANSAS