

Economic Analysis of the Potential For Developing Overnight Camping Facilities on or Near Major Highways in Oklahoma

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Introduction

Since the end of World War II, people throughout the country have been seeking more outdoor recreation. The main factors contributing to this increasing demand have been population increases, higher per capita incomes, improved transportation and more leisure time available due to shorter work weeks, longer vacations, and earlier retirements.

One recreational activity now sought by many families is camping. The Outdoor Recreation Resources Review Commission (ORRRC) showed in 1960 that 8 percent of all persons 12 years and older did some camping. Recent data, compiled by the U. S. Department of Interior showed a 62 percent increase for the period 1960 to 1965 with 10 percent of the population participating in camping. Their projections estimate there will be a 78 percent increase in camping participation for the period 1965 to 1980 and a 238 percent increase from 1965 to the year 2000. Oklahoma has shared in this increase as evidenced by a 121 percent increase over the past five years in total campers at state parks and recreation areas.

Several factors explain the vast increase in camping. First, people have become more mobile. A study conducted by ORRRC showed that 44 percent of all people traveling by car on their vacation trips, traveled over 500 miles and 25 percent traveled 1,000 miles or more. As the mobility of people increases, so do their nights spent away from home. Since many of these people have a natural attraction toward the outdoors and many may be trying to stretch their vacation dollars further, they choose camping as a way of spending the night.

Another reason for the increase in camping has been the availability of new and modern camping vehicles. Today, very few modern conveniences need to be sacrificed in order to camp overnight. In the past, tents have been the most widely used type of camping shelter, but with the growth of camping has come a rapid increase in the variety of camp-

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ing shelters used. The most important of these have been travel trailers, pickup coaches, and camping trailers. The volume of total sales of these vehicles have more than tripled since 1961. The total units of all recreational vehicles in use as of January 1, 1967 was 1,250,000. This number is expected to increase to 7.5 million between 1975 and 1980.

As a result of the increase in camping as a form of recreation, there has been an increasing demand for campgrounds that provide the facilities for campers. Campgrounds may be generally classified into two types: vacation campgrounds and transient campgrounds.

Vacation campgrounds are usually a destination in themselves. They may be located near a major highway—but are generally near some unique natural attraction such as a stream, lake or forest. People using these areas usually spend two or more nights at the same campground—often a week or more. Types of activities carried on at a vacation campground might include swimming, fishing, boating, hiking, horseback riding, and nature studies. Vacation campgrounds require high investments since only a few individual sites can be constructed on a given tract of land, and with the varied activities, several facilities must be provided to meet the recreation needs of the entire camping family. Some private vacation campgrounds exist in Oklahoma, but State parks provide the best examples of vacation type campgrounds.

Transient campgrounds may be considered as a substitute for motels. They are used by people not primarily concerned with participation in recreational activities, but are mainly interested in overnight camping facilities. These people may be traveling for almost any reason, such as a business trip or vacation trip. With the increased use of various types of recreation vehicles, several special and convenient facilities are needed. Special facilities such as ice dispensers, automatic laundries, sewage disposal connections, showers, and electrical hookups may be demanded by users of these areas. Investment for this type of campground is generally less than for the vacation type since several sites can be constructed in a small area and the emphasis is on simplicity and convenience of facilities.

Problems and Potentials

Considering past data and future projections, there will be a pressing need in the United States for increased recreation areas and facilities. With this growing demand for recreation services on one side and demands on the public budget on the other, future public support for free recreation facilities will be reduced. This is already becoming evident by such bills as the Federal Water Project Recreation Act, passed in July of 1965. The Act states that not more than one-half of the separable

cost allocated to recreation shall be borne by the United States Government. The state or some other non-Federal agency must provide the remainder of the construction cost and agree to provide all operation and maintenance funds. Failure of a non-Federal agency to express an intent to participate will result in no facilities being provided for recreation. This act applies to all Federal Water projects approved or authorized after its passage.

The State of Oklahoma presently does not charge fees to enter any of its State parks or recreation areas, nor does it charge for camping in any of these areas. The philosophy in Oklahoma has been to provide access to these areas and the use of developed facilities in the areas at no cost to the user. Appropriations from the State legislature for construction, operation, and maintenance, and development by Federal construction agencies, have provided the bulk of Oklahoma's public recreation facilities. The requirement of the Federal Water Project Recreation Act will put added pressure on many states' legislature to provide more financial support if the State's systems of parks and recreation areas are to keep pace with the increasing use of such areas.

One alternative for providing the funds necessary for cost sharing in recreational development, is for the State to charge user fees at its parks and recreational areas.

Due to the Land and Water Conservation Fund Act of 1965, Federal recreation fees are now being charged in Oklahoma at 39 selected Corp of Engineer sites at seven reservoirs. The permits available are annual permits, temporary permits, and day use permits. The annual permit (\$7.00) is for a non-commercial vehicle and all its occupants good for admission to all Federally designated areas located anywhere in the United States. Temporary permits (\$3.00) are for a noncommercial vehicle and all its occupants good for six months at one project only. Day use permits (\$1.00) are for a non-commercial vehicle and all its occupants good for entrance on one day at one project only. Proceeds from the charge of these fees will go into the Land and Water Conservation Fund to help provide more national and local outdoor recreation opportunities for the entire population.

With this initiative by the Federal Government, the possibility exists that State parks and recreation areas may start charging a user fee in the near future. If this occurs, the opportunity for the private sector to provide more of the needed recreational facilities will be improved. As the situation exists, with the free admission policy to our State parks and recreation areas in Oklahoma, the charging of fees by the private sector is not going to attract many local people unless the site has exceptional attractions or facilities, or unless customers are out-of-staters who are accustomed to paying admission and user fees. The

charging of a fee by the State would put the private sector on a more competitive basis for local as well as out-of-state trade.

Since most transient campers tend to be out-of-state travelers, tourist traveled highways are vital for transient camping potential. Several major North-South and East-West highways cross Oklahoma which are tourist routes where potential for transient campgrounds might exist. Since most of the land along these major highways is privately owned, it offers a good opportunity for the private sector to develop such areas. Also, transient campgrounds located near the highways would be in a much better location to serve the traveling public than most of the publicly operated camping areas.

The Oklahoma Highway Department is in the process of building ten improved rest stops along Oklahoma highways, but they plan to prohibit overnight camping at these areas. They also have no plans in the foreseeable future for developing overnight camping areas along Oklahoma highways.

Tourism and travel are gaining more importance in the United States as the increasing population finds more leisure time and money to spend, together with better travel facilities including improved nationwide roads. As such activities usually bring valuable social and economic benefits to the states that provide adequate and appealing facilities for the traveler, income from tourism and travel is becoming an important factor in states' economies. A study conducted in Oklahoma during 1962-63 showed an out-of-state person staying overnight in Oklahoma spent three times as much money as a person just traveling through.

Transient campgrounds could aid in promoting tourism and travel in Oklahoma. They could provide a place for people with camping equipment to stay while seeing sights in Oklahoma or provide road weary travelers passing through Oklahoma a place to stop and rest or spend the night. Although a person camping out overnight would not be expected to spend as much as one spending the night in a motel, he would substantially increase the contributions out-of-state motorists make to the economy of Oklahoma.

Transient overnight campgrounds in Oklahoma could also provide one potential for supplementing income of farmers and ranchers with land adjacent to or near major highway interchanges or tourist traveled highways. In some cases, it could enable them to divert less productive crop or pasture land to a more rewarding use.

Currently, however, little is known in Oklahoma about the economics of development and use of overnight camping facilities. Private landowners seeking ways to increase their incomes by serving the traveling public are in need of economic information concerning the profitability of providing such overnight facilities. Also public agencies are

in need of information to aid in the planning of future overnight camping facilities.

Objectives

The general objective of this study is to determine the economic potential for developing private overnight camping facilities on or near major highways in Oklahoma. Specific objectives are to: (1) determine the types of facilities preferred by the traveling public; (2) determine the general location of overnight camping facilities to best serve the needs of travelers passing through Oklahoma; (3) estimate the profit potential from establishing overnight camping facilities; and (4) establish guidelines for development of overnight camping facilities by both public agencies and private landowners in Oklahoma.

Procedure

Primary data for this study were obtained from post card questionnaires distributed at six locations in Oklahoma during the summer of 1967. These locations include Hominy, Pawhuska, Checotah, Locust Grove, Clinton, and Alva. The questionnaires were distributed by the Traffic Data Section in the Planning Division of the Oklahoma Department of Highways, in conjunction with their 1967 Origin and Destination Studies. These areas were selected by the Highway Department, but were all satisfactory for this study since all locations had major highways passing through them. Interstate highways could not be used for questionnaire data due to Federal regulations.

When conducting the origin and destination studies at one of the selected areas, the Highway Department first divided the survey area into major areas called zones. These zones were determined by delineating the Central Business District and by establishing sector lines along major streets and permanent barriers. These zones were further divided into sub-zones in order to distinguish areas of unusual land use and to separate areas of various traffic generating characteristics. Interview stations were then set up on each of the routes radiating from and external to the survey area. Each interview station was operated for a period of sixteen hours, from 6 a.m. to 10 p.m., during a normal weekday. At Checotah and Locust Grove, interviews were also conducted on weekends for the same length of time.

After the origin and destination interview was completed, the post card questionnaire designed for this study was given to all people with recreational vehicles and/or all out-of-state cars. Out-of-state cars were included to take account of the people who might have a tent in the

trunk of their car and for people who might use transient overnight camping facilities if they knew they existed along major Oklahoma highways. A total of 10,000 questionnaires were distributed of which 2,407 were returned.

The data collected were tabulated and analyzed to determine certain characteristics and preferences of those people who expressed a willingness to use overnight camping areas. Campground investment and cost budgets were then prepared and guidelines established for a representative transient campground based on these characteristics and preferences.

Supplemental data for this study were obtained from personnel with the Oklahoma Department of Highways, Soil Conservation Service, Corp of Engineers, Oklahoma Industrial Development and Park Department, and Platt National Park.

Analysis of Data

Questions included on the questionnaire were designed to obtain some idea of the general characteristics and preferences that could be expected of typical transient campground users.

A knowledge of these general characteristics of a user can aid potential operators in locating, planning, and developing a campground. Questions asked to obtain general characteristics included: the purpose of the trip, origin and destination, nights spent away from home and nights in Oklahoma, accommodations used, how camping areas were selected, type of camping equipment used, and which Oklahoma highways they traveled most often.

The people were asked to give the purpose, origin, and destination of their trip to determine the reason they were traveling and to get a general idea of the flow of traffic and characteristics of the people who would be using transient campgrounds. Knowing the origin and destination of the people could also be useful when advertising to determine the best sources of new customers. The nights stayed in Oklahoma and the accommodations used were included to determine the average nights spent away from home in Oklahoma and to see how many were paying for overnight accommodations opposed to staying with friends or relatives. How the people who camped selected their camping spot was included to determine what the best methods would be for advertising transient campgrounds. The type of camping equipment used by campers was asked to aid in determining what proportion of a campground should be allocated to tent sites and to wheeled vehicles. Also, knowing the highways in Oklahoma which the potential transient campground customers travel can aid in locating a campground.

Facilities and accommodations are important to campers in selecting a campsite and are also important in terms of costs of construction of a campground. Costs can be kept to a minimum by knowing which facilities and accommodations are actually desired by the users. Another important consideration in establishing a campground is location. For example, the distance people are willing to travel to get to a transient campground from the highway is very important in terms of location of a site. On the other hand, availability of large quantities of water such as a lake, or scenic qualities of the area, would not be nearly as important in determining a location for a transient campground as for a vacation campground.

The amount charged to stay at a transient campground will also affect its use. After the campground is established, the charge must at least cover costs of establishing and operating facilities over a long period. Knowing what the users would be willing to pay per night would be helpful in determining this charge and also in estimating expected income from the campground.

In view of these factors, the people who indicated they would use overnight areas were asked to give their preferences concerning facilities and accommodations desired at an area, location with respect to distance off the highway, and their willingness to pay for staying one night at such an area.

Willingness to Use Overnight Camping Areas

Transient campgrounds must have sufficient customers to be successful. To obtain an indication of the potential demand for transient campground facilities, the question was asked, "Would you use areas for overnight camping if they existed on or near major Oklahoma highways?" Seventy percent indicated yes they would use the areas and 30 percent indicated no they would not use the areas (Table 1).

Of the 580 negative responses, 85 resided in Oklahoma, 155 listed Oklahoma as their destination, which might imply they were staying with relatives or friends, and only 70 of the 580 owned camping equipment. Only 28 of the 580 were passing through Oklahoma destined for

Table 1. Response to Questionnaire Based on Willingness to Use Overnight Camping Areas Along Highways If They Existed

Response to Question	Number	Percent
Yes	1,332	69.67
No	580	30.33
TOTAL	1,912	100.00

another state, owned camping equipment and indicated they would not use overnight camping areas. Not every question was answered on each questionnaire causing a difference in total response to each question. Where this occurred, the number not responding is listed at the bottom of each table.

Purpose of Trip, Origin, and Destination

Sixty-eight percent of the respondents indicated they were on a vacation trip, 12 percent a business trip, eight percent were traveling for recreational purposes, and the remaining 12 percent gave their purpose as some combination of the three. A survey of the purposes of trips reported is presented in Table 2.

People indicating they would use transient campgrounds originated from one foreign country and 49 states, excluding only North Dakota. California ranked first in origin states accounting for 17 percent of the total volume. Oklahoma was second with 14 percent followed by the bordering states of Texas, Arkansas, Missouri, and Kansas, respectively, with a combined total of 27 percent of the vehicles. States east of the Mississippi represented 30 percent and those west of the Mississippi, other than the six states named above, were the starting point for 12 percent of all recreational vehicles or out-of-state cars traveling in Oklahoma. A summary of the proportion of people originating from each state is presented in Table 3.

The number of respondents that had a primary destination in Oklahoma was 24 percent of the total. Twenty-six percent of these respondents indicated Oklahoma as their origin, implying they were people returning from a trip or were people traveling throughout the state and were willing to use transient campgrounds. This could be due to the fact that many State camping areas are too far off the well-traveled highways or are many times overcrowded.

Table 2. Purpose of Trip Which Respondents Are Presently On

Purpose of Trip	People Reporting Specific Purpose	
	Number	Percent
Vacation	902	68.13
Business	153	11.56
Recreation	108	8.15
Vacation—Recreation	86	6.50
Vacation—Business	63	4.75
Recreation—Business	12	.91
Total	1,324 ¹	100.00

¹Eight respondents did not answer the question.

Table 3. Origin of Respondents Indicating They Would Use Overnight Camping Areas

Home State	Number	Percent	Ranking
California	232	17.48	1
Oklahoma	185	13.94	2
Texas	147	11.08	3
Arkansas	86	6.48	4
Missouri	62	4.67	5
Kansas	61	4.60	6
Arizona	54	4.07	7
Illinois	52	3.92	8
Ohio	52	3.92	9
Tennessee	39	2.94	10
New Mexico	34	2.56	11
Indiana	34	2.56	12
Michigan	30	2.26	13
Pennsylvania	25	1.88	14
New York	22	1.66	15
Others ¹	212	15.98	
Total	1,327 ²	100.00	

¹Others include Canada and every state except North Dakota.

²Five respondents did not answer this question.

California followed in second place as a destination with 15 percent of the vehicles, with Arkansas and Texas next with eight percent and seven percent, respectively. All except the five states of Connecticut, Delaware, New Jersey, North Dakota, and West Virginia were represented. A summary of the proportion destined for each state is presented in Table 4.

Table 4. Destination of Respondents Indicating They Would Use Overnight Camping Areas

Destination	Number	Percent	Ranking
Oklahoma	324	24.32	1
California	200	15.02	2
Arkansas	113	8.48	3
Texas	95	7.13	4
Arizona	93	6.98	5
Missouri	64	4.80	6
New Mexico	50	3.75	7
Colorado	36	2.70	8
Illinois	34	2.55	9
Tennessee	31	2.33	10
Kansas	28	2.10	11
Ohio	26	1.95	12
Canada	21	1.58	13
Michigan	19	1.43	14
Virginia	16	1.20	15
Others ¹	182	13.68	
Total	1,332	100.00	

¹Others include Canada, Mexico and every state except Connecticut, Delaware, New Jersey, North Dakota, and West Virginia.

Nights Away From Home on Trip and Accommodations Used

The total nights spent away from home by the 1,241 respondents who answered the question was 17,857. The range was from 0 to 90 nights, with the average being 14 nights. The nights stayed in Oklahoma accounted for 18 percent of the total nights. The range of the number of nights stayed in Oklahoma was from 0 to 60 with the average being 2.6 nights. Twenty-three percent of the total questionnaires that indicated they would use transient campgrounds in Oklahoma were not staying overnight in Oklahoma on their present trip.

Thirty-six percent of the respondents utilized motels during their stay in Oklahoma. Camping accounted for 32 percent and hotels for less than one percent. Some combination of these three types of accommodations were utilized by another 13 percent of the respondents. Other accommodations made up the remaining 18 percent of which staying with friends or relatives was most frequently mentioned. A summary of the nights away from home and the accommodations used are presented in Table 5.

Reason for Selecting Campsite

Of those respondents who indicated they camped while on their trip, 42 percent selected their campsites due to road signs. Thirty-six percent indicated camping guides and 22 percent indicated some other reason such as friends telling them, previous knowledge, maps, or brochures, for selecting the campsite where they stayed. A summary of the reasons for selecting campsites is presented in Table 6.

Table 5. Nights Spent Away From Home on Trip and Accommodations Used

Total Nights Away From Home	Number	Percent
Number of total nights stayed in Oklahoma	3,241 ²	18.15
Number of total nights stayed in other states	14,616	81.85
TOTAL	17,857¹	100.00

Type of Accommodation	People Reporting Specific Type	
	Number	Percent
Motel	439	35.98
Camping	390	31.97
Motel — Hotel	77	6.31
Motel — Other	37	3.03
Camping — Other	34	2.79
Motel — Camping	14	1.15
Hotel	4	.33
Other	225	18.44
TOTAL	1,220³	100.00

¹ - 14.40 = average nights spent away from home based on 1,241 responses.

² - 2.61 = average nights stayed in Oklahoma based on 1,241 responses.

³ - 112 respondents did not answer the question.

Table 6. Sources of Information Used by Those Who Camped in Choosing Their Campground

Source of Information	Campers Reporting Specific Source		
	Number	Percent	Ranking
Road Signs	321	42.13	1
Camping Guides	272	35.69	2
Others ¹	169	22.18	3
Total	762 ²	100.00	

¹Others include such sources as friends, previous knowledge, and chance.
²70 respondents did not answer the question.

Type of Camping Equipment Used

Results from the respondents using camping equipment revealed 29 percent of them used tents. Pick-up campers followed closely with 22 percent followed by camping trailers and travel trailers with 17 percent and 15 percent, respectively. Others accounted for the remaining 18 percent of which cars and station wagons were the most frequently mentioned. A summary of the types of camping equipment used is presented in Table 7.

Table 7. Type of Camping Equipment Presently Used by Campers

Equipment Type	Campers Reporting Each Type		
	Number	Percent	Ranking
Tent	247	28.95	1
Pick-up and Camper	186	21.80	2
Camping Trailer	141	16.53	5
Travel Trailer	125	14.66	4
Other	154	18.05	3
TOTAL	853 ¹	100.00	

¹ - 479 respondents did not answer the question.

Highways Traveled Most Frequently in Oklahoma

Since most people indicated they traveled more than one highway frequently, there was a total of 2,330 responses to this question of which nearly 50 percent indicated they traveled highways 66 and I-40 most frequently. Highway 66 was mentioned by 27 percent and I-40 by 20 percent. Next in order were highways 69 with eight percent, 64 with five percent, and 44 with five percent. Interstate 35 was the sixth most mentioned highway with four percent of the response. One possible reason for its low percentage was due to the fact that no questionnaires were distributed at locations that would intercept traffic entering or leaving it. Since Federal regulations prohibit use of interstate highways in conducting studies where traffic is stopped, much of the North-South

traffic in Oklahoma was not included in the survey. However, due to coverage, it is assumed that the same characteristics would prevail on the North-South traffic. A summary of the proportion of people using each highway is presented in Table 8.

Table 8. Main Highways Traveled in Oklahoma by Respondents Who Indicated They Would Use Overnight Areas

Highways Traveled	People Reporting Specific Highways	
	Number	Percent
66	637	27.34
I-40	473	20.21
69	184	7.90
64	122	5.24
44	116	4.98
I-35	104	4.46
33	95	4.08
75	90	3.86
60	73	3.13
Turner T.P.	63	2.70
Rogers T.P.	60	2.58
99	33	1.41
20	31	1.33
270	31	1.33
77	28	1.20
Others	192	8.25
TOTAL	2,330 ¹	100.00

¹ - Many of the 1,332 responding mentioned more than one highway

Preferences for Facilities and Accommodations

To identify the primary accommodations and facilities desired by campers, three items were listed on the questionnaire to check and space was left available to list others.

The items desired most were showers and tables. Eighty-four percent desired showers and 79 percent desired tables. Food service such as a general store or snack bar, ranked third in preference with 31 percent and rest rooms were fourth with 25 percent of the response. One reason for the lower response to rest rooms might be that many people assumed rest rooms are always present or they are present in conjunction with the showers. Other items listed, in order of their ranking, were water outlets 12 percent, electrical hook-ups eight percent, cooking pits five percent, and a swimming area was mentioned by four percent of the people. A summary of the type of facility or accommodation desired at a campsite is presented in Table 9.

Table 9. Type of Facility or Accommodation Desired At Campsite

Type of Accommodation	Respondents Desiring Facility	Percentage of Total Respondents ¹	Ranking
Shower	1,103	84.00	1
Tables	1,043	79.44	2
Food supplies	401	30.54	3
Rest rooms	325	24.75	4
Water outlets	153	11.65	5
Electrical hook-ups	107	8.15	6
Barbecue pits	63	4.80	7
Swimming area	57	4.34	8
Laundry	41	3.12	9
Shade	41	3.12	10
Sewage disposal	24	1.83	11
Ice	18	1.37	12
Playground	14	1.07	13
Lighting	12	.91	14
Firewood	12	.91	15
Telephone	4	.31	16

¹—Computed on 1,313 total camper basis, 19 respondents did not answer the question.

Distance Respondents Are Willing to Travel to an Overnight Area

The majority of the users indicated they were willing to drive five miles or less from the highway to get to an overnight camping area. Eighty-four percent of these responses fell within this range. Of this amount, 24 percent fell within the range of two miles or less and 34 percent in the range of one mile or less.

All distances over five miles accounted for only 16 percent of the response, with the distance of ten miles accounting for 11 percent of this amount. The most anyone was willing to travel was 25 miles and the least anyone would travel was one-fourth of a mile. The average distance they all would travel off the highway was 3.9 miles. A summary of the maximum distances off the highway people were willing to travel is presented in Table 10.

Preferences to Pay

In obtaining the willingness of people to pay to stay one night at an overnight campground, the amounts of \$1.50, \$2.00, and \$2.50 were listed on the questionnaire with space available to indicate the maximum amount they would pay.

Based on the responses which indicated the maximum amount they would pay, 84 percent fell in the range of \$3.00 or less. Only 16 percent indicated they would pay over \$3.00 to stay one night. The average maximum amount they would pay was \$2.56. A summary of the amounts users would pay is presented in Table 11.

Table 10. Maximum Distance Off of Highway Users Would be Willing to Travel to an Overnight Campsite

Distance in Miles	Campers Reporting Specific Distances	
	Number	Percent
1	417	33.88
2	298	24.21
3	42	3.41
4	23	1.87
5	254	20.63
6	11	.89
10	140	11.37
15	17	1.38
20	24	1.95
25	5	.41
TOTAL	1,231 ¹	100.00

¹ - 101 respondents did not answer the question.

Table 11. Amount Users Are Willing to Pay Per Night For Use of Overnight Campsite With Desired Facilities

Fec in Dollars	Campers Reporting Specified Amounts ¹	
	Number	Percent
1.50	441	39.03
2.00	463	40.97
2.50	226	20.00
Range in Dollars	Campers Reporting Maximum Amounts ²	
	Number	Percent
0 to 1.00	50	15.93
1.01 to 1.50	4	1.27
1.51 to 2.00	74	23.57
2.01 to 2.50	44	14.01
2.51 to 3.00	92	29.30
3.01 to 3.50	9	2.87
3.51 to 4.00	24	7.64
4.01 to 5.00	17	5.41

¹ - Computed on 1,130 total basis.

² - Computed on 314 total basis.

Location and Demand Aspects of Transient Campgrounds in Oklahoma

The location of a campground for transients is of paramount importance in assessing the potential profitability of the enterprise. No attempt is made in this study to determine a present or future demand for transient campgrounds for a specific farm location or for Oklahoma. Each farm location involves a unique relationship to the existing or potential demand for a campground. Also, complete data are not available to determine a specific demand for transient campgrounds in Oklahoma. In general, the demand for a transient campground would be a relation describing demand behavior of campground users and expresses

the quantity of services users are willing to purchase as a function of price per unit of service and other demand determining variables.

Other variables, which will determine demand behavior of users for a transient campground might include such variables as: price and availability of alternatives (other campgrounds or motels); ownership of camping equipment; variables related to location of site, such as distance from highway or environmental features; variables measuring quality of facilities at campground, such as flush toilet opposed to pit type; length of trip away from home; and other socioeconomic variables such as occupation, age, education, and income.

Since the traveling public is the source of most of the users of such an area, location with respect to well-traveled highways and distance from the highway are of primary concern. Also, being located near a town would be advantageous, if food supplies were not furnished at the campground. The proximity of a proposed campground to similar facilities, either privately or publicly owned, should also be considered. One transient campground near a small town might be profitable, but the establishment of a similar facility nearby could cause both to be unprofitable. State or federally owned facilities would not be as great a concern in Oklahoma since few are located adjacent to the main traveled highways. Most of them are five miles or more off the highway or are not located on the main tourist highways.

Exact location for transient campgrounds cannot be selected since their location along Oklahoma highways is limited by an insufficient supply of usable water and limited access to interstate highways. The Oklahoma Highway Department states that finding a sufficient supply of water is their biggest problem in establishing their improved rest stops in Oklahoma. Based on the response from the questionnaires on most traveled highways in Oklahoma and the distance off the highway people are willing to travel to a campground, general areas in Oklahoma can, however, be selected as potential sites.

In selecting a location with respect to distance off the highway, response from potential users indicated the nearer the highway the better the opportunities for obtaining customers, with the ideal location being adjacent to the highway. However, the location should be far enough from the highway to avoid traffic noise. Since transient campground customers generally are people traveling who stop one night, few of them are willing to drive very far off their selected routes of travel. Also being located adjacent to a highway will make campgrounds easier to see and locate, and less advertising is necessary than one hidden from the traveler's view.

Since U.S. highways 66, 64, 69 and I-40 were indicated as the four most traveled highways in Oklahoma, they would seem to be the choice

locations for transient campgrounds. Since I-40 has controlled access, locations along it would be limited to areas adjacent to or near highway interchanges. One potential location would be near Henryetta where I-40 intersects with the Indian Nation Turnpike and Highway 62. Here, the possibility exists to obtain customers traveling north-south and east-west across Oklahoma.

Other potential locations exist along Highway 66, since it was mentioned as the most frequently traveled highway in Oklahoma. Here, the possibility exists for location near a town such as Clinton or Elk City which would provide a place for campground users to buy needed food or camping supplies. Also, there are no state operated areas adjacent to the highway along this route. Other general areas similar to the one mentioned can also be selected for the other highways keeping in mind volume of travel on highway, distance off highway, access from highway, other similar facilities, and water supply.

Presently, there is no generally accepted method of estimating patronage for particular recreational enterprises. However, there are some general indicators that can help estimate future patronage and the resulting income potential for a transient campground. Among these are patronage levels of existing facilities, mobility of people, and number of recreational vehicles in use.

Since there are no strictly transient campgrounds existing in Oklahoma, it is difficult to obtain patronage levels. However, a franchised campground organization in California¹ with approximately 150 existing campgrounds across the United States, claims that out of all the units open, only one has failed financially and that was attributed to poor management.

The mobility of people is expected to increase greatly in the future. According to the Outdoor Recreation Resources Review Commission, the miles of intercity travel by auto is expected to grow from 570 billion passenger miles in 1960 to 2800 billion in the year 2000. Distance traveled and time spent away from home on vacations and outdoor recreation trips are both expected to increase more than 50 percent per person and more than double in total from 1960 to the year 2000.

As previously stated, the total volume of all recreational vehicles in use in 1967 (1.25 million) is expected to increase to 7.5 million between 1975 and 1980.

Considering only Oklahoma, projections of future out-of-state travel by people with camping vehicles (pick-up campers or cars pulling trailers) cannot be estimated since no records have previously been kept. However, estimates of the total number of out-of-state passenger cars entering Oklahoma have been made annually since 1962, although the number

¹Kampgrounds of America, Inc.

of cars pulling a trailer was not recorded and pickup trucks were not included. The study upon which subsequent years are based was conducted by the Oklahoma Department of Highways during the period from July, 1962, to June, 1963, and includes estimates of the total number of them staying overnight. Each successive year since 1963, traffic volume figures have been updated according to traffic growth during the period based upon permanent traffic counters located throughout the state. The figures for the years 1962-63 through 1966 are presented in Table 12.

These figures show nearly constant increases each year until 1966. In 1966 there was only a 3 percent increase in total number entering Oklahoma and the number staying overnight. 1967 figures are not available at this time.

In summary, the major factors to consider when evaluating a potential transient campground site are: location with respect to a well traveled highway and distance off the highway; access from the highway; a sufficient supply of usable water; distance from a town; and distance from another private or public campground. While no attempt is made to estimate a demand for a specific campground in Oklahoma, estimated increases in population, per capita disposable incomes, mobility of people, recreational vehicles, distance traveled on vacations and outings, and time spent away from home on vacation trips, for the entire United States should all increase the need for transient campgrounds.

In Oklahoma alone, the number of out-of-state cars entering and the number staying overnight has been steadily increasing over the past several years. If it is assumed that these two items will continue to increase, they alone should generate significant demands for transient campgrounds in Oklahoma.

Transient Campground Budget

The budgets for a representative private transient campground having 30 improved campsites are presented in this section. Estimated

Table 12. Number of Out-of-state Passenger Cars Entering Oklahoma and Number Staying Overnight

Year	Total Number Entering Oklahoma		Number Staying Overnight	
	Number	Percent Increase	Number	Percent Increase
1962-63	7,712,499		3,099,521	
64	8,175,248	5.99	3,262,986	5.27
65	8,665,763	6.00	3,458,765	5.99
66	8,925,736	3.00	3,562,528	3.00

SOURCE: State Of Oklahoma Department of Highways.

investment requirements, annual ownership costs, annual operating costs, labor requirements, annual total returns, annual net returns, breakeven points, and returns to management and land are computed for the campground. A 30 campsite campground was used so it could be handled along with other farming operations by the farm family without hiring large amounts of labor.

Investment Requirements and Costs

Investment requirements for a transient campground may differ somewhat for each particular site depending on such factors as location or existing facilities. The investment requirements listed in Table 13 are what might be expected when a campground is established starting with no existing facilities other than land.

Based on the results of the questionnaires, the campground is assumed to be divided in the proportion of one-third tent sites and two-thirds sites for wheeled vehicles such as pickup campers or camping trailers. Five acres of land are assumed to be used for the total campground. Less land could be used since privacy is not an important factor at a transient campground, but the extra land allows room for future expansion, if necessary. The United States Soil Conservation Service recommends 14 campsites per acre or 3,000 square feet per site. This includes tent space, vehicle parking space, and use area for a fireplace, table, wood storage and trash container.

Cost figures used for the capital investments were collected by the Soil Conservation Service and represent average costs gathered from various public agencies that plan, develop, and operate recreation areas and facilities. Construction of the facilities are in accordance with standards of the U.S. Forest Service, U.S. Corp of Engineers, and/or State Park Services. The cost of capital investment items could be reduced

Table 13. Estimated Investment and Depreciation for a Transient Campground of 30 Campsites

Item	Number Units	Unit Cost (dollars)	Total Cost (dollars)	Est. Life (years)	Annual Depreciation (dollars)
Land Improvements	—	—	2,115	20	106
Sanitary Facilities	—	—	7,800	20	390
Water Supply	—	—	2,100	20	105
Electricity	—	—	450	10	45
Picnic Tables	30	15	450	5	90
Fireplaces	30	10	300	10	30
Garbage Containers	4	40	160	5	32
TOTAL	—	—	13,465	—	828

considerably in some instances if the operator supervised construction and used family labor where possible. Also, costs of the facilities and improvements are subject to change due to such factors as variation in size, quality and kinds of material used in construction, and location and topography of the land. The capital investments included in this budget are for land improvements, sanitary facilities, water supply, electricity, picnic tables, fireplaces, garbage containers, and roadside signs.

Land improvement costs include clearing and leveling the land to provide campsites and an access road. This cost will vary considerably depending on the topography of the land and the length of access road required.

Since showers were the most desired facility by the potential users, a better than average shower and toilet facility was included. It is of sufficient size for a 30 campsite campground, constructed of concrete blocks on concrete slab with a ceramic tile floor and a plexaglass roof. It provides separate facilities for men and women with a total of four flush toilets, one urinal, four lavatories, and six showers. The cost of a septic tank of sufficient size and a drainage field is also included in the cost of the sanitary facilities. The costs and size of all the sanitary facilities could vary depending on different counties and their health standards. It is important to point out here that counties do have varied standards and must be incorporated in the planned establishment of the campground.

The water supply costs include drilling a well, a pump, a well house, a storage tank, water line, and faucets. Electricity costs include poles, line and connections. Picnic tables, fireplaces and garbage containers were also included for each of the 30 campsites since they ranked high on the list of preferred facilities. Food service was not included since the campground is assumed to be located near some town and due to the added investment and labor requirements involved. Four metal signs were assumed to be placed along the roadside for advertising and directional purposes.

Estimated Annual Operating Costs

The annual operating costs (Table 14) of the campground are divided into fixed annual costs and variable annual costs. The operating costs used are from a study conducted by the Agricultural Economics Department of Oklahoma State University on farm based recreational enterprises in Oklahoma. Also, estimates were obtained from interviews with actual operators of campgrounds in Oklahoma.

Fixed annual costs are those which do not vary because of use. Included in the budget are depreciation, insurance, taxes, and interest on investment.

Table 14. Estimated Annual Operating Costs for a Transient Campground With 30 Campsites

		(dollars)		
Annual Fixed Costs:				
Depreciation (Table 13)		828		
Insurance		125		
Taxes		80		
Interest on Average Investment @ 6%		404		
Total Annual Fixed Costs		1,437		
		Levels of Use (Percent)		
		25	40	55
		----- dollars -----		
Annual Variable Costs:				
Hired Labor (1.50 per hr.)	—	—	240	
Utilities	60	70	80	
Repairs	130	150	170	
Advertising	130	130	130	
Miscellaneous	50	50	50	
Total Annual Variable Cost	370	400	670	
Total Annual Fixed Cost	1,437	1,437	1,437	
TOTAL ANNUAL OPERATING EXPENSES	1,807	1,837	2,107	

The annual cost of buildings and facilities is reflected as depreciation cost. The straight-line method was used to compute depreciation with the assumption of no salvage value.

Insurance costs and taxes will vary a great deal depending on such factors as the insurance company, the taxing authority, size of investment, and location of campground. Average figures for campgrounds in Oklahoma were used in this budget. The interest on investment used was six percent of average investment. This charge is made whether borrowed money is used or not because of the opportunity cost involved.

Annual variable costs are those which vary because of volume of business. These costs were computed for three use levels of 25 percent, 40 percent, and 55 percent occupancy, to represent a range of operating conditions. Capacity is considered to be full occupancy for 138 days beginning on about May 1, and ending about September 15. The variable costs included were hired labor, advertising, utilities, repairs and miscellaneous.

The labor requirement was based on a season of 138 days of operation with 40 hours allowed to prepare for opening and 40 hours allowed to repair, paint, and store equipment at the end of the season. Hired labor is required only for the campground operating at 55 percent capacity. The labor requirements for the operation and maintenance of a

transient campground with 30 improved campsites with showers and toilet facilities for three levels is presented in Table 15.

The other variable costs of utilities, repairs, advertising and miscellaneous are difficult to judge except by experience. The figures used in the budget are based on actual campground operations in Oklahoma.

Estimated Annual Total Returns

Since the sale of food supplies was not included in the budget, the rental of campsites was considered to be the only source of income from the campground. Total returns from the rental of campsites was computed using three levels of occupancy and four levels of camping fees (Table 16).

The different levels of occupancy were computed on the basis of 138 operating days times 30 available campsites to determine the total possible uses of sites at full capacity. This amounted to 4,140 total uses. The levels of occupancy used were 25, 40 and 55 percent. Twenty-five percent occupancy amounted to 1,035 uses or an average of 7.5 uses per day. Forty per cent occupancy was 1,656 uses or an average of 12 uses per day and 55 percent amounted to 2,277 uses or 16.5 uses per day.

The fees assumed to be charged per campsite were \$1.50, \$2.00, \$2.50 and \$3.00. No levels greater than \$3.00 were used since the questionnaire

Table 15. Labor Required for Operation and Maintenance of a Private Campground With 30 Improved Campsites With Shower and Toilet Facilities¹

Month	Days of Operation	Type of Work	Average Percent of Season Capacity Rented					
			25		40		55	
			Family Labor	Hired Labor	Family Labor	Hired Labor	Family Labor	Hired Labor
----- Hours -----								
April		Preparing for opening on May 1,	40	—	40	—	40	—
May	31	Renting campsites and cleaning	149	—	174	—	174	40
June	30	Renting campsites and cleaning	144	—	168	—	168	40
July	30	Renting campsites and cleaning	149	—	174	—	174	40
August	31	Renting campsites and cleaning	149	—	174	—	174	40
September	15	Close September 15, and use 40 hrs. to store equipment	116	—	124	—	124	—
TOTAL	138		<u>747</u>		<u>854</u>		<u>854</u>	<u>160</u>

¹Mr. M. R. Jordan. 1963. "Opportunities for Improving Rural Family Income Through Recreation Enterprises." Agricultural Experiment Station Bulletin 683, University of Arkansas, Division of Agriculture, Fayetteville.

Table 16. Estimated Annual Total Returns for Three Levels of Occupancy and Four Levels of Camping Fees.

		Levels of Campground Use ¹ (Percent)		
		25	40	55
		(1,035 Uses)	(1,656 Uses)	(2,227 Uses)
Camping Fees	(dollars)	(dollars)	(dollars)	(dollars)
	1.50	1,553	2,484	3,416
	2.00	2,070	3,312	4,554
	2.50	2,588	4,140	5,693
	3.00	3,105	4,968	6,831

¹—Based on 138 days x 30 campsites = 4,140 possible uses of campsites at full capacity

indicated only 15 percent of the people were willing to pay over \$3.00 to stay one night. Although charges might vary for campsites depending on whether it is a tent site or trailer site or whether electricity was desired or not, these charges are assumed to be average fees charged per site.

Estimated Annual Net Returns

Annual net returns were estimated by deducting total estimated annual costs from total estimated annual returns. The difference represents net returns to family labor and management. As shown on Table 17, there are negative returns at only the 25 percent occupancy level and \$1.50 fee level.

As shown in Table 14, annual fixed costs are much higher than annual variable costs at each patronage level. It was noted earlier that costs of capital items were based on Soil Conservation Service figures and

Table 17. Annual Net Returns to Family Labor and Management For a Transient Campground with 30 Campsites

Fee		Level of Occupancy (Percent)		
		25	40	55
Total Returns at —	1.50	1,553	2,484	3,416
Total Annual Costs		1,807	1,837	2,107
Net Returns		—254	647	1,309
Total Returns at —	2.00	2,070	3,312	4,554
Total Annual Costs		1,807	1,837	2,107
Net Returns		263	1,475	2,447
Total Returns at —	2.50	2,588	4,140	5,693
Total Annual Costs		1,807	1,837	2,107
Net Returns		781	2,303	3,586
Total Returns at —	3.00	3,105	4,968	6,831
Total Annual Costs		1,807	1,837	2,107
Net Returns		1,298	3,131	4,724

that these costs might be significantly reduced where family labor is used in construction. Such a reduction would have a large effect on net revenue. If annual fixed costs were reduced by 25 percent, for example, net revenue would be increased at the 40 percent occupancy level and \$2.00 fee level from \$1,475 to \$1,834 or 24 percent.

Returns to Management and Land

If a charge of \$1.50 per hour is made for all labor and subtracted from net returns, the result obtained is returns to management and land. This is a typical charge for labor for recreational enterprises in Oklahoma.

As shown in Table 18, at the 25 percent use level there are positive returns to management and land at only the \$3.00 camping fee. At the 40 percent level there are positive returns to management and land at all fee levels except \$1.50 and at the 55 percent use level there are positive returns at all four levels of camping fees. Based on the data used in these budgets, to obtain a favorable return to management and land at least a 40 percent use level is necessary with a camping fee charged of \$2.00 or more. Considering the findings from the questionnaires and all other data gathered and assuming that the campground had the improved facilities contained in the budgets, it is reasonable to expect that the 40 or 55 percent occupancy levels could be obtained. Also the questionnaires indicate that fees of \$2.00 and \$3.00 can be charged for an improved campsite.

The transient campground budgeted here is only shown to be used as a guideline in the budgeting of an actual campground in Oklahoma. Since there is no typical transient campground, the figures used in the budgets can only approximate actual figures and are subject to a variety

Table 18. Returns to Management and Land

	Levels of Camping Fee			
	\$1.50	\$2.00	\$2.50	\$3.00
	dollars			
Net Returns at 25% Use Level	— 254	263	781	1,298
— Labor (747 hr. x 1.50)	—1,121	—1,121	—1,121	—1,121
Returns to Mgt. & Land	—1,375	— 858	— 340	177
Net Returns at 40% Use Level	647	1,475	2,303	3,131
— Labor (854 hr. x 1.50)	—1,281	—1,281	—1,281	—1,281
Returns to Mgt. & Land	— 734	194	1,022	1,850
Net Returns at 55% Use Level	1,309	2,447	3,586	4,724
— Labor (854 hr. x 1.50)	—1,281	—1,281	—1,281	—1,281
Returns to Mgt. & Land	28	1,166	2,305	3,443

of changes. Three capacity levels and four fee levels were used in the budgets to represent a range of income levels. These budgets were based on a 30 campsite campground, but capacity usage will vary depending on the number of campsites. As shown by the budgets, in general net returns to the campground will depend mainly on the extent of annual fixed costs, level of camping fee charged, and occupancy level obtained.

Summary and Conclusions

The over-all objective of this study was to determine the economic potential for developing private overnight camping facilities on or near major highways in Oklahoma.

During the Summer of 1967, questionnaires were given to all recreational vehicles plus out-of-state cars at six selected locations in Oklahoma. The returned questionnaire provided the basic data for the study.

Analysis of the data collected indicated that most of the people that would use transient campgrounds in Oklahoma would be out-of-state travelers passing through Oklahoma on a vacation trip of about two weeks. They would spend approximately two nights in Oklahoma. They would choose their camping area by road signs or a camping guide and would prefer to drive no more than two miles off the highway to get to the area. Most of them would use some type of wheeled vehicle to camp and would desire showers, tables, food supplies, and rest rooms at the campground. They would be willing to pay \$2.00 - \$3.00 per night to stay at the campground.

Based on these findings and other data, representative transient campground budgets were developed. Three levels of occupancy and four levels of camping fees were used to represent different levels of income. The budgets showed an operator of a campground with 30 improved campsites and a \$13,500 investment in facilities, must obtain at least an average 40 percent occupancy level during a 138 day operation period and charge \$2.00 or more as a camping fee to obtain a favorable return to management and land.

No attempt was made in this study to determine a demand for a specific transient campground location in Oklahoma since each location involves a unique relationship to the existing or potential demand. Due to insufficient data, a general demand for transient campgrounds in Oklahoma was not determined although several indicators point to an increasing need. These include, for the United States, the estimated increases in the number of recreational vehicles in use, the mobility of the people, and the patronage levels of existing facilities, and for Oklahoma, the number of out-of-state cars entering and the number staying overnight.

Based upon the results of the study, it is concluded that transient overnight campgrounds have economic potential in Oklahoma for supplementing farm income. The development of a transient campground with private capital can be profitable and can provide an excellent alternative use for excess labor and land. However, it can be concluded that a transient campground as a primary source of income for farm families, is not feasible. Careful planning and good management are crucial factors in developing and operating a transient campground. It is unlikely that a transient campground would provide an alternative for marginal agricultural or rural entrepreneurship.

Those people that are marginal in agriculture are likely to find themselves completely unable to cope with a still more complex type of industry, particularly in its marketing aspects. Personal characteristics are critical in a business like a transient campground where relations with the public are necessary. An operator must possess the ability to meet and work with customers in fulfilling their demands. Many farm operators due to their background of individualism and experience in dealing with non-human enterprises may lack the adaptability necessary to satisfy the paying public.

Implications for successful campground operations for either public or private sector can be drawn from this study. Chance for success in attracting local and out-of-state users should increase by following recommendations based upon such data.

Recommendations

- (1) Locate campgrounds near well traveled tourist highways, preferably 66, I-40, 64, 69 in Oklahoma.
- (2) Locate campgrounds where they are easily accessible from the highway and there exists a sufficient supply of usable water.
- (3) Locate campgrounds no further than five miles off the highway with the preferred distance being two miles or less. If located adjacent to the highway, some distance should be allowed to avoid traffic noise.
- (4) Locate near a town if food supplies are not furnished at the campground.
- (5) Provide facilities or accommodations for at least hot showers, tables, and rest rooms at the campground.
- (6) Maintain a moderately to highly developed campground with special emphasis on clean and sanitary rest rooms and showers.
- (7) Design campground on the basis of approximately one-third of the spaces for tents and two-thirds of the spaces for wheeled recreation vehicles.

- (8) Base charges per site on investment and expenses, keeping in mind a maximum of \$3.00 for an improved campsite in Oklahoma.
- (9) Promote quality camping to build repeat patronage and word-of-mouth advertising.
- (10) Provide and maintain sufficient roadside signs on all access roads and approach highways when possible.
- (11) Advertise in camping guides to reach out-of-state people.