

# BLUEPRINT FOR BAYFIELD·2

# **BLUEPRINT FOR BAYFIELD·2**

**THE RELATIONSHIP BETWEEN NEW  
PRIVATE INVESTMENT IN BASIC TOUR-  
IST FACILITIES AND BAYFIELD TAX  
REVENUE FOR PUBLIC DEVELOPMENT**

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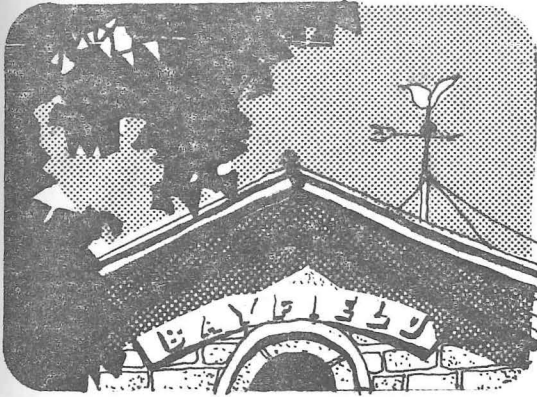
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## INTRODUCTION



A few years ago several friends of the city of Bayfield, Wisconsin, became concerned about the city's future. Bayfield had long been surrounded by state and local parks and had drawn a number of vacationers and sportsmen but a proposal of federal expansion and development of a large lakeshore park area threatened the city's tranquil beauty. The friends envisioned throngs of tourists descending upon the area and bringing with them uncontrolled land development of a most undesirable and distasteful nature.

Out of this concern came a study entitled "Blueprint for Bayfield-- A Design Study For A Great Lakes Community".<sup>1</sup> "Blueprint for Bayfield" describes the history and present character of Bayfield, identifies several problem areas that would be irritated by uncontrolled development, and suggests at the same time preserving and enhancing the scenic qualities that are unique to this little city.

As work on the "Blueprint" progressed, it became apparent that a large sum of money would be required to undertake the suggested program. Whether this money would be available and from where were unanswered questions.

This report attempts to put the cost of the suggested development into focus with the resources that might be available for its completion. This is done through the following series of inquiries.

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<sup>1</sup>"Blueprint for Bayfield", Department of Landscape Architecture, College of Agricultural and Life Sciences, University of Wisconsin, Madison, 1969.

- Can tourism be expected to be important to the area in the future? Is the problem worth concern?
- How many visitors might be drawn to the proposed Apostle Islands National Lakeshore?
- Once in the area of the park, how many will visit Bayfield?
- What will visitors spend in the city and for what items?
- What impact will these expenditures have on the need for new facilities of various kinds and the expected jobs to be generated?
- What will the suggested program of development cost? How much of the cost will be borne by private and public investors?
- Will the public improvements be warranted or even possible in view of the scale of anticipated economic benefit?

As tourism develops in and around Bayfield, the community will grow in the following categories -- but not necessarily in the following order:

- Public improvements -- parking, recreational areas, programs to enhance the city's advantages.
- Basic tourist services -- lodging accommodations, food services, and automobile services.
- Private recreational business -- guide services, marina, winter sports facilities.
- Other retailing, service and amusement activities accessory in nature to the basic tourist services.
- Residential base development for permanent population.



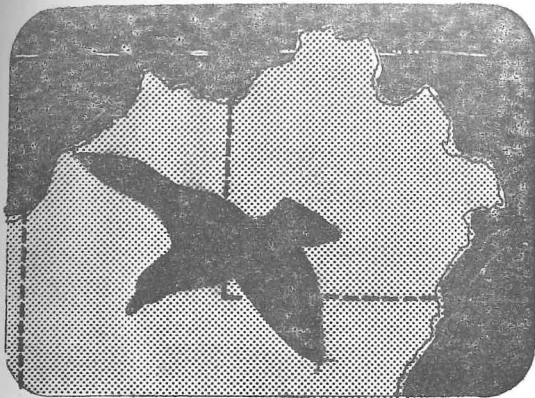
The concern here is with the first two categories. The first area, public improvements, is examined as outlined by the "Blueprint for Bayfield".

The second category, basic tourist services, provides the seed money for growth. These businesses must grow to retain new tourism. As they do, they will be the base for both public development and growth in the other categories.

The last three groups are left to the imagination of people in Bayfield.

This report intends to focus on the tourist services coming to Bayfield in an attempt to predict the timing and scale of growth and how it affects the total program.

## BACKGROUND OF THE BAYFIELD AREA



Bayfield is located in Bayfield county, on the east coast of the Bayfield Peninsula -- the northernmost tip of the state's mainland (Figure 1). The county contains 960,000 acres and is second in area only to Marathon county.<sup>2</sup>

The county was settled in the last quarter of the nineteenth century. Initially lumbering was the main industry, with farming developing during the first quarter of the century. Population grew until 1920 and then declined. The 1960 Census reported a county wide population of 11,910 (down 13% from 1950) and a population for the city of 969, down from 1153 in 1950. The number of farms dropped from a high of 2400 to slightly over 800 which, along with the decline in commercial fishing, explains the drop in population. The State Highway Commission has estimated a 1990 population of 7773 for Bayfield county.

For some time, until the advent of the lamprey through the St. Lawrence Seaway, the area enjoyed a healthy commercial fishing industry -- especially around the Apostle Islands. Some of the islands still show remnants from that era.

As the county grew smaller, it lost much of its young population. The median age for the county is 35.8 years, while for the state as a whole, it is 29.4. Between 1950 and 1960, 2725 more people left the county than entered. Approximately 450 Indians live in the county, most of them on the Red Cliff Reservation.

<sup>2</sup>Wisconsin Department of Resource Development, Economic Profile Bayfield County, Madison, 1960.



LAKE

SUPERIOR

Bayfield

BAYFIELD COUNTY

Ashland Co.

Douglas Co.

Ottawa National Forest

Michigan

Iron Co.

Chequamegon National Forest

Minnesota

Burnett Co.

Washburn Co.

Sawyer Co.

Price Co.

Chequamegon National Forest

Incomes are low. The 1959 median family income in the county was \$3712, compared to a state average of \$5926. Two-thirds (or 66%) of the families had 1959 incomes of less than \$4000. Statewide, the same percentage is about 34%.

Most of the county's employment is in manufacturing, particularly the wood-working plants and the DuPont explosives plant. A knitting operation in Ashland attracts a number of the women workers. Dairy is the dominant form of farming, although apples and other fruit crops are also important. Retail sales are not strong in the county because many residents travel to Superior or Ashland for shopper's goods. Restaurants and related business show good receipts -- probably due to the tourist trade, although no reliable figures exist for this business in the county. Tables 1-9 summarize the economic conditions in Bayfield county.

The recreation-vacation industry will likely play an important part in the county's future. The county has 218 lakes, totaling 22,000 acres; 53 trout streams totaling 366 miles; 13 muskie lakes and flowages totaling 3100 acres. Existing parks in the county include:

FEDERAL: Chequamegon National Forest - 263 acres

STATE: (Including state-owned and state-leased public hunting and public fishing grounds.)

Flag River - 600 acres (SE of Port Wing) offering deer, ruffed grouse, hare;

Lost Creek - 40 acres (West of Cornucopia) offering waterfowl, deer, ruffed grouse and fishing;

Middle Eau Claire Lake - 60 acres (West of Drummond) offering pike, bass, waterfowl and fur-bearers.

COUNTY: Big Rock County Park - 40 acres (On Sioux River) with trout fishing and picnicking;

Twin Bear Lake County Park - 35 acres (On Twin Bear Lake) with swimming, tent camping, boating and fishing;

Various County Forests - comprising 163,000 acres offering swimming, fishing, camping and hiking.



In the winter, skiers are attracted to two ski slopes: Mt. Ashwabay near Bayfield and Mt. Telemark near Cable.

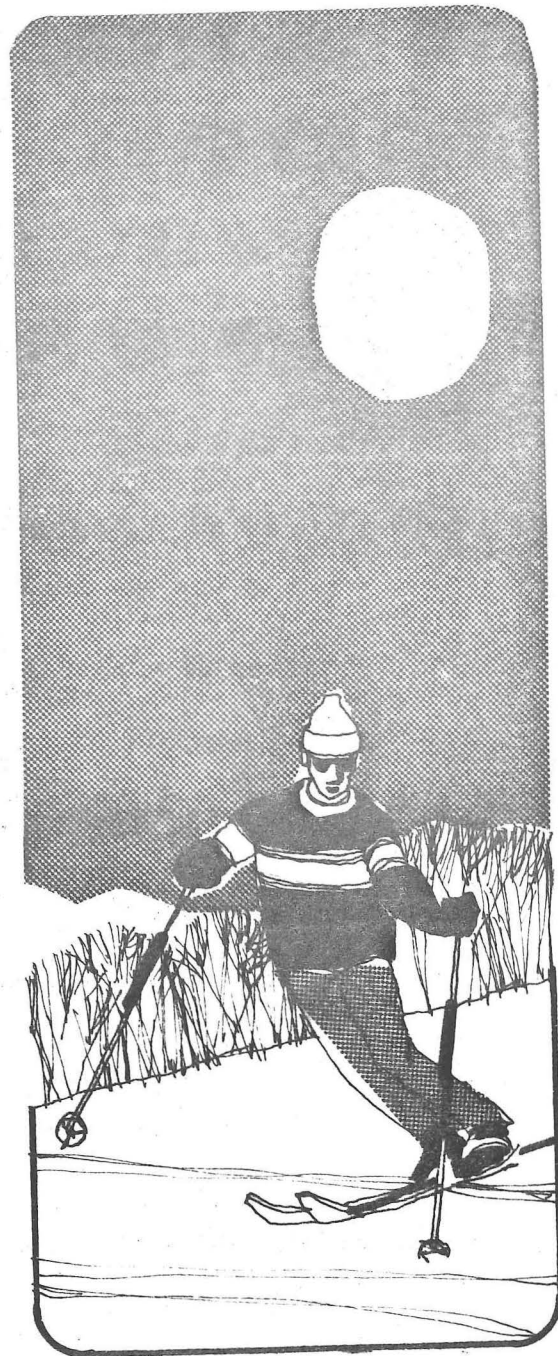


TABLE 1  
LABOR FORCE - BAYFIELD COUNTY

Employees covered by OASI, March 1964

	<u>Employees</u>	<u>Jan-Mar Payroll</u>	<u>Business</u>
TOTAL	945	\$939,000	171
Construction	35	28,000	11
Manufacturing	429	550,000	31
Transportation and utilities	41	46,000	9
Wholesale trade	26	38,000	5
Retail trade	231	161,000	72
Finance, insurance, etc.	34	27,000	9
Service	141	82,000	29

Source: Wisconsin Department of Resource Development,  
Economic Profile Bayfield County, Madison, 1960.



TABLE 2  
EMPLOYMENT TRENDS OF RESIDENTS - BAYFIELD COUNTY

	<u>1930</u>	<u>1960</u>	<u>1960 % Distr.</u>	
			<u>State</u>	<u>County</u>
Agriculture and forestry	3,092	1,208	11	31
Mining	12	4	.2	.0
Construction	139	247	5	6
Manufacturing	608	728	33	19
Transportation and utilities	289	266	6	7
Other services	1,336	1,406	45	36

Source: Economic Profile Bayfield County.



TABLE 3  
AGRICULTURE - BAYFIELD COUNTY

	<u>1964</u>	<u>1959</u>
Number of farms	822	897
Acres in farms	158,972	161,401
% of land in farms	16.9	17.1
Average size of farm	193.4	179.9
Value, land and buildings per acre	\$51.29	\$46.19
Operators working off farms 100 days or more	329	305

Source: Economic Profile Bayfield County.

TABLE 4  
RETAIL TRADE - BAYFIELD COUNTY

Number of stores           (1963) 163                           (1958) 164

Sales, in thousands of dollars:

		<u>Percent of state</u>
1963	\$7724	0.15
1958	6635	0.15
1948	6660	0.21

Per Capita, 1963, county:	\$ 702
State average	1,263

<u>By Kind of Business 1963</u>	<u>In thousands of dollars</u>	<u>Percent of state</u>
Lumber, hardware, farm equipment	929	.23
General merchandise	1,041	.17
Foods	2,047	.17
Automotive	1,225	.13
Gas stations	563	.15
Apparel	45	.02
Furniture and house equipment	N. A.	--
Eating-drinking places	1,115	.23
Drug stores	317	.21

Source: Economic Profile Bayfield County

TABLE 5  
MANUFACTURING DATA - BAYFIELD COUNTY

	<u>1963</u>	<u>1958</u>
Number of establishments	40	36
Employees	463	481
Percent of state	0.10	0.11
Total payroll	\$2,266,000	\$2,148,000
Percent of state	0.08	0.10
Average earnings per hour for production workers	\$2.18	\$2.23
State average	\$2.65	\$2.27
Value added, manufacturing	\$4,613,000	\$3,507,000
Percent of state	0.09	0.09

Jobs: June, 1964, Per 1000 Population:

County: 43      State average: 113

Source: Economic Profile Bayfield County.

TABLE 6  
WHOLESALE TRADE - BAYFIELD COUNTY

Number of establishments:		1963 - 12
		1958 - 12
	<u>Sales</u>	<u>Percent of state</u>
1963:	\$4,077,000	0.07
1958:	\$1,870,000	0.04

Source: Economic Profile Bayfield County.

TABLE 7  
POPULATION OF INCORPORATED PLACES - BAYFIELD COUNTY

	<u>Washburn (city)</u>	<u>Bayfield (city)</u>	<u>Cable (village)</u>	<u>Mason (village)</u>
1960	1896	969	262	100
1950	2070	1153	250	140

Source: Economic Profile Bayfield County.

TABLE 8. GOVERNMENT FINANCE - BAYFIELD COUNTY

Property assessment - full value 1964

All property:	\$41,102,535
Per capita	\$ 3,513
State average	\$ 5,429
Mfg. real estate	\$ 1,784,100

	<u>County of Bayfield</u>	<u>State average</u>
Tax levy	\$1,233,523	
Per capita	105.47	151.09
Full value rate per \$1,000	26.34 <sup>a</sup>	24.30 <sup>a</sup>
County rate	8.13	6.55
Local rate	2.80	6.61
School rate	18.88	14.48
Income tax collected	<u>1964</u>	<u>Percent of State</u>
Personal	\$ 310,642	0.12
Corporate	77,976	0.11
State shared taxes		
Total	276,937	0.19
Utility	105,431	0.40
State aids		
Total	\$1,798,743	0.93
Eudcational	694,386	0.72
Highway	740,085	1.43

<sup>a</sup>After tax relief

Source: Economic Profile Bayfield County.



TABLE 9  
EIGHT LARGEST MANUFACTURING EMPLOYERS (MARCH, 1965) - BAYFIELD COUNTY

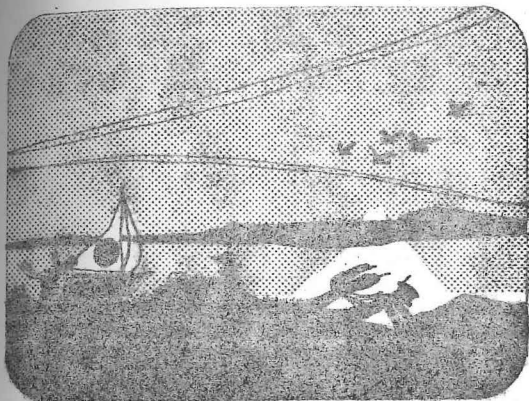
<u>Name</u>	<u>Location</u>	<u>Product</u>	<u>Employment</u>
Aldridge, W. E. & Company	Drummond	Sawmill	20-49
Hipsher, Floyd	Bayfield	Sawmill	8-19
Grandview Industries	Grandview	Fabricated millwork	8-19
All-Wood Manufacturing Co.	Bayfield	Plywood, wood products	50-99
Aldridge, Ray, Inc.	Drummond	Wood products	8-19
E. I. Du Pont de Nemours & Company	Barksdale	Explosives	200-249
Washburn Foundry	Washburn	Iron castings	8-19
Tester Corporation	Iron River	Woodworking machinery	8-19

THREE LARGEST NON-MANUFACTURING EMPLOYERS (PRIVATE) - BAYFIELD COUNTY

Michela Coal & Dock Co.	Washburn	Miscellaneous wholesaler	20-49
Schraufnagel & Sons	Mason	Lumber, building materials	20-49
Meyers Drugs	Bayfield	Drugstore	8-19

Source: Economic Profile Bayfield County.

## THE ROLE OF TOURISM IN THE BAYFIELD AREA



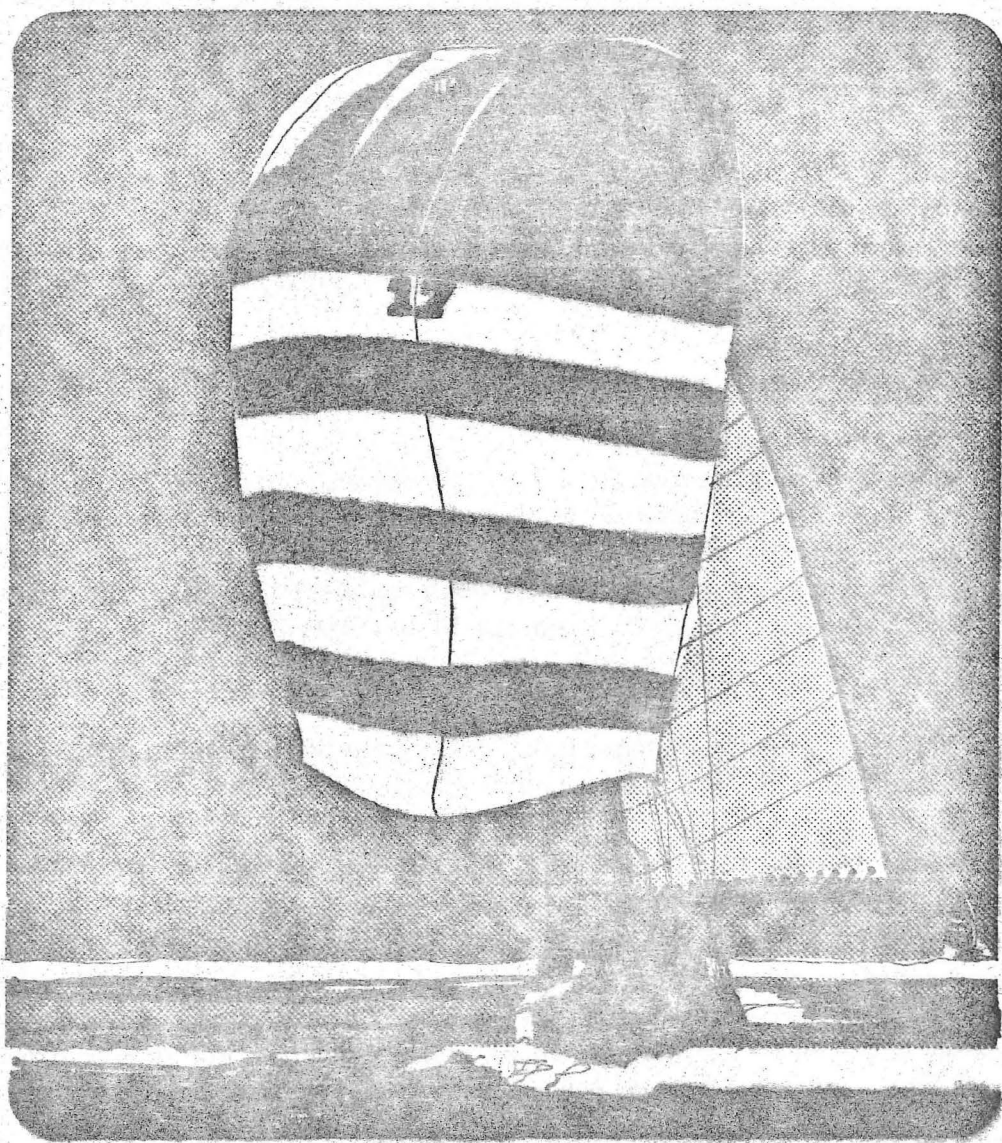
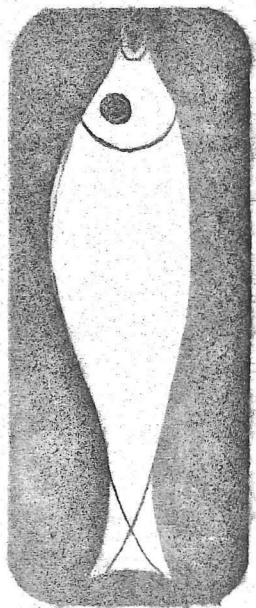
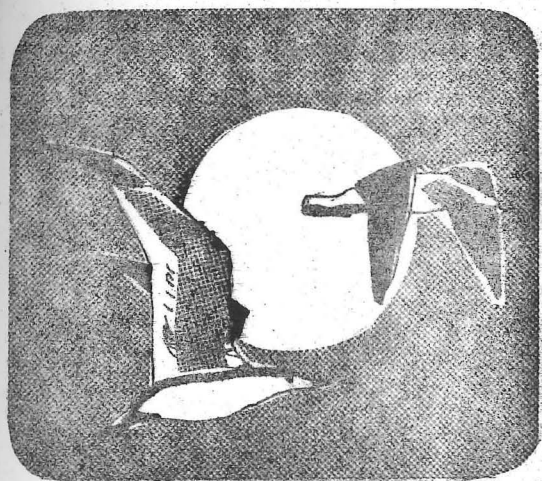
With the decline of farming, commercial fishing and forestry around Bayfield and throughout much of northern Wisconsin, tourism remains one of the most important economic activities. Expenditures for the vacation-recreation industry in 1959 in Wisconsin have been estimated at \$581 million.<sup>3</sup> Another estimate placed them at \$978 million in 1963, including expenditures for the activities and also for equipment and supplies.<sup>4</sup> The basis of this industry is an endowment of natural resources: lakes, forests, wildlife, fish, pleasant summer climate and fine year-round sports facilities and scenery.

The future will bring increases in demand for recreational facilities. Rising incomes, greater mobility, a shorter work week and many new ideas all point to greater recreational activity. Completion of the Interstate highway system during the 1970's will bring more people within traveling range of the northern Wisconsin area. But at the same time, of course, part of the current market will be attracted elsewhere.

Two important considerations have a bearing on what can and must be done to take advantage of the potential of tourism -- for Bayfield in particular and for the entire state of Wisconsin in general. These two considerations are (1) the typical tourist (his preferences, interests, budget, etc.) and (2) the current problems of the tourism business.

<sup>3</sup>Fine, I. V. and E. E. Werner, The Tourist-Vacation Industry in Wisconsin, Volume II, No. 4, Wisconsin Commerce Papers, 1961.

<sup>4</sup>Checchi and Company, The Potentials of Commercial Tourism in the Upper Great Lakes Region, A Report to the Upper Great Lakes Regional Commission, Washington, D. C., June 1968.



**TABLE 10**  
**PURPOSE OF TRIP TO OR THROUGH WISCONSIN EXPRESSED IN PERCENTAGES**

	<u>Residents</u>	<u>Non-residents</u>
Main vacation	48.4	48.1
Short pleasure trip	25.8	21.2
Enroute to another state	4.4	14.6
Business trip	19.5	13.2
Other	<u>1.9</u>	<u>2.9</u>
	100.0	100.0

Note: -

"Other" category consisted mostly of military personnel enroute to summer encampments.

**RESPONDENTS CLASSIFIED BY OCCUPATION OF HEAD OF FAMILY**

	<u>Respondents</u>	
	<u>Number</u>	<u>Percentages</u>
Professional, technical workers, non-farm manager, proprietors	5,055	32.9
Farmers and farm managers	658	4.3
Clerical, sales workers	2,085	13.6
Craftsmen, foremen, non-farm laborers	4,738	30.8
Service workers	945	6.2
Retired	709	4.6
Others	537	3.5
Non-respondents	<u>638</u>	<u>4.1</u>
<b>TOTAL</b>	15,365	100.0

**RESPONDENTS CLASSIFIED BY FAMILY INCOME LEVEL**

	<u>Respondents</u>	
	<u>Number</u>	<u>Percentage</u>
Less than \$3,000	754	4.9
\$ 3,000 - 4,999	2,135	13.9
\$ 5,000 - 5,999	2,423	15.8
\$ 6,000 - 6,999	2,124	13.8
\$ 7,000 - 9,999	3,796	24.7
\$10,000 - 14,999	2,109	13.7
\$15,000 and up	1,429	9.3
Non-respondents	<u>595</u>	<u>3.9</u>
Total respondents	15,365	100.0

Source: Fine, I. V. and E. E. Werner, The Tourist-Vacation Industry in Wisconsin,  
Volume II, No. 4, Wisconsin Commerce Papers, 1961.



Another study found that the average resident party consisted of four people while the non-resident party averaged 3.8 people.<sup>6</sup> The typical vacation party in the state is a family. Residents reported that they spent 7.3 days in the state out of a trip of 7.7 days. The length of a non-resident's vacation trip was 9.7 days, and he spent 7.4 days in the state.

In 1966, Professor I. V. Fine of the University of Wisconsin, prepared a report on the economic and demographic characteristics of vacation-recreation trips in Wisconsin which do not take the vacationer away from home overnight.<sup>7</sup> The data was collected from questionnaires mailed to people writing the Wisconsin Conservation Department for information.

He found that the non-residents tend to have slightly higher incomes, somewhat more education, and are frequently older. Based on this it is suggested that advertisers and planners attempt to identify the group they are trying to attract -- resident or non-resident. Those of higher income levels have a desire to go farther afield.

In questioning vacationers about what they do, Fine learned that the driving or touring vacation is about as popular as the sedentary vacation (in which people stay in one place) among both residents and non-residents. Approximately 40% of each group prefers each type. Vacation patterns appear to be quite stable from year to year.

In an attempt to learn what attracted Wisconsin vacationers (or failed to attract them), Fine and Werner provided subjects of their interviews with lists of facilities and activities and asked the interviewees to rate them.<sup>8</sup> For both residents

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<sup>6</sup>Fine, I. V., Wisconsin and the Vacationer, Wisconsin Development Series, Wisconsin Department of Resource Development, Madison, 1966.

<sup>7</sup>Ibid.

<sup>8</sup>Fine and Werner, The Wisconsin Vacationer, Volume I, No. II, Wisconsin Vacation-Recreation Papers, 1966.





and non-residents the most frequently mentioned attraction was "scenery, sight-seeing"; "fishing" was second and "rest and relaxation" was third. The survey asked what the visitor liked--not his purpose for coming to the vacation place. The city of Bayfield offers abundant facilities for the enjoyment of all three of these activities.

In another study in the work by Fine and Werner,<sup>9</sup> 40% of the people making inquiries of the Madison office of the Wisconsin Conservation Department indicated that the reason they took their main vacation in Wisconsin was either scenery and sight-seeing or the influence of friends and relatives.

Table 11 shows scenery and sight-seeing is the greatest attraction to both residents and non-residents as well as vacationers and private cottage users.

The kind of tourist that is attracted to northern Wisconsin frequently does not spend a great deal of money. In a study of Washburn county vacationers it was found that very few vaca-

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<sup>9</sup>Fine and Werner, Tourist-Vacation Industry.

TABLE 11  
 FACILITIES, ATTRACTIONS AND ACTIVITIES LIKED BY SURVEY RESPONDENTS  
 EXPRESSED AS PERCENTAGE OF ALL RESPONDENTS

	Vacationers		Private Cottage Users	
	Resident	Non-Resident	Resident	Non-Resident
Scenery, Sight-Seeing	40.4	38.0	35.6	42.9
Fishing	26.7	20.5	20.5	20.7
Rest and Relaxation	18.1	15.6	29.1	22.2
Swimming	9.7	7.0	7.4	6.1
Highways	9.3	10.8	8.9	14.1
Hotel, Motel, Resort Accommodations	7.0	7.3	--	--
Weather, Climate, Fresh Air	7.1	10.3	14.0	23.6
Special Attractions (Fairs, Parks, Dells, etc.)	5.4	6.6	--	--
Friendly People	5.1	9.3	2.3	10.2
Wildlife, Hunting	4.1	2.1	4.0	1.1
Boating	3.7	3.5	6.5	3.0
Food Service	3.3	4.5	--	--
Change from City Life	2.8	1.6	17.2	8.2
Others	5.4	5.7	8.7	11.0

Source: Fine and Werner, Tourist-Vacation Industry.

tioners in the area stayed at a motel.<sup>10</sup> Nearly half of the 1271 respondents used a resort rental cottage. Nearly one-third used private cottages; many stayed in a private home or camped out. Less than 3% used a motel. Washburn county is adjacent to the southwestern edge of Bayfield county, and although it has no lakeshore, the habits of its visitors may be representative of all visitors to northern Wisconsin.

The tourism-vacation business in Wisconsin, and apparently in neighboring states, suffers from several afflictions.

Many of the facilities are very old and obsolete. Operations provide too little money for proper maintenance and modernization.

Capital is in short supply. Proprietors are frequently under-capitalized and operate on a small uneconomical scale. Local banks are unable or unwilling to make extensive loans to area operators despite the importance of their industry.

Expenditures by tourists are generally low. Some activities, such as camping, provide very little business to local merchants. Rates in general seem to be below those for comparable facilities in other vacation areas.<sup>11</sup>

The business is highly seasonal, occurring mostly in the summer months. This causes annual occupancy to be very low and the fixed operating costs have to spread thickly over a few months. Because of the seasonality, labor is drawn mainly from the vacationing college students, who don't spend their wages in the area.

Suggestions for dealing with these problems have been made in a broad program of action developed in a report to the Upper Great Lakes Regional Commission, which serves the northern parts of Minnesota, Wisconsin and Michigan.

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<sup>10</sup>Littlefield, James E., The Economic Impact of Recreation, Wisconsin Development Series, Wisconsin Department of Resource Development, Madison, 1965.

<sup>11</sup>Checchi and Company, Commercial Tourism.

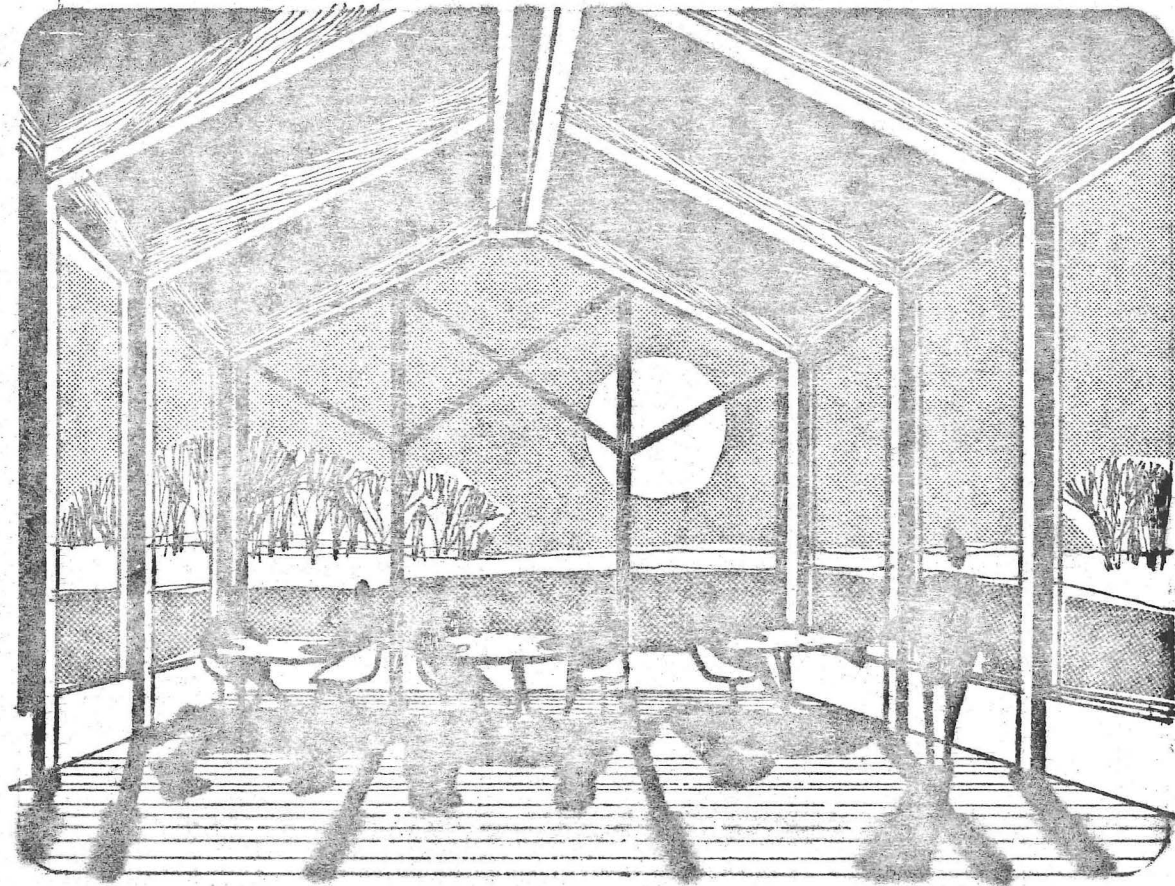
"Three strategies for tourism development are proposed. They are designed to hold present markets and to attract new, higher-spending tourists to the region.

"The first strategy is to upgrade existing facilities. Analysis indicates that although realistically nothing could be done with an estimated one-third of existing facilities, about one-third could increase their business by 60%--from 25% annual occupancy to 40%--if investments were made in modernization, winterizing, and expansion. But this would only be attainable if management skills are improved--higher, more efficient, standards of service, accounting, promotion, etc., which would facilitate financing for upgrading. The action recommended is consideration of a tourist-resort-recreation extension service, patterned after existing agricultural extension service, to focus on field work with resort operators, local communities, and banks. It would provide the mechanism necessary to improve management of existing resorts, help obtain financing, and stimulate upgrading of facilities.

"The second strategy is to plan for year-round tourism on a large scale. Analysis shows that potentials for combined summer and winter tourism are concentrated geographically in the region. It is estimated that the remaining one-third of existing facilities could be upgraded to attain 65% annual occupancy in these areas. But there is an urgent need for new, top-grade resorts to attract skiers, snow-mobile enthusiasts, conventioners, golfers and other high-spending tourists to the region. Master planning in areas where year-round potentials are concentrated would facilitate an aggressive investment promotion program on a three-state basis. Year-round tourism enhances economic feasibility of new roads, airports, a variety of restaurants and service facilities, historic restorations, and cooperative promotions.

"The third strategy is to establish a network of "star" attractions to attract sight-seeing tourists from all over the United States. Historically, tourists visiting the region have stayed at a single destination; few visit all three states. Now the National Park Service has plans to develop national attractions at Sleeping Bear Dunes and Pictured Rocks in Michigan, Apostle Islands in Wisconsin, and Voyageurs National Park and Grand Portage in Minnesota. These national "star" attractions provide a nucleus



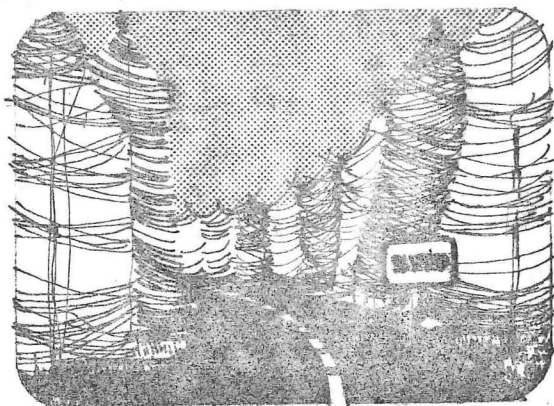


for a network of attractions that will draw new tourists to the region and hold them longer. Sight-seeing tourists demand first quality facilities and spend relatively more for accommodations, food, gas, souvenirs, etc., than families in resorts. New, large-scale attractions are recommended to fill the gaps in the network. The network of attractions can be the basis of a three-state regional promotion, since it will encourage touring of all three states on one vacation trip."<sup>12</sup>

This report gives an idea of the magnitude and scope of actions necessary to realize the full potential of the tourism industry. It is concerned with attracting and retaining the "commercial" tourist who stays and eats in commercial establishments. The "recreation-oriented" tourist (e.g., camper) is disregarded because his spending is much lower and fewer jobs are created.

<sup>12</sup> Ibid.





## FORECAST OF BAYFIELD VISITOR VOLUME

Estimating the number of people that will use a particular outdoor facility is quite difficult. There are several techniques, none of which is wholly satisfactory. One attempt for the proposed park was made by Professor Fine.<sup>13</sup>

Using information gathered in origin-destination studies in 1963 at two permanent traffic counting stations of the State Highway Department (one each outside Superior and Ashland), and making certain assumptions about vacation-traveler habits as observed in earlier studies, Fine estimated that 920,000 man-days will be spent in visits to the proposed Apostle Island National Lakeshore (Table 12).

Furthermore, it is estimated that slightly over 88,000 man-days will be spent inside the park in the 370 campsites and 75 rental lodgings proposed. This means, as Fine points out, that about 90% of the man-day visits will be by people who will spend the night outside the park. No attempt is made in Fine's work to estimate how many of the visitors will be attracted to various areas within the park vicinity.

At the time of this writing (1970) the legislation necessary to create this park has not yet been passed, although it appears imminent. Fine's estimate, then, should be made for the first possible operational year of the park--say 1972.

<sup>13</sup>Fine, I. V., Apostle Islands, Some of the Economic Implications of the Proposed Apostle Islands National Lakeshore, Volume III, No. I, Wisconsin Vacation-Recreation Papers, University of Wisconsin, Madison, May 1965.

TABLE 12  
ESTIMATE OF USAGE OF PROPOSED APOSTLE ISLANDS NATIONAL LAKESHORE

	<u>Superior Highway Counter Station</u>	<u>Ashland Highway Counter Station</u>	<u>Total</u>
Total 1963 traffic count	1,747,764	852,966	
Annual vacation travel	560,000	510,000	
Annual social-recreation travel	575,000	111,000	
Potential vacation users <sup>a</sup>	393,000	357,000	<u>749,000</u>
Elimination of duplicate count <sup>b</sup>	393,000	357,000	561,750
Potential social-recreation Users <sup>c</sup>	345,000	66,000	
Adjustment for outdoor Recreation <sup>d</sup>	172,500	33,000	205,500
Maximum potential vehicles			767,250
Realistic potential <sup>e</sup>			230,175
Average party per vehicle			<u>4</u>
ESTIMATE OF USAGE			920,000

<sup>a</sup> 70% of vacation travel will take place during season.

<sup>b</sup> 25% of vehicles pass both counters or pass a single twice in one day

<sup>c</sup> 60% of social-recreation travel will take place during season.

<sup>d</sup> 50% of social-recreation travel will be for outdoor type activities.

<sup>e</sup> 30% of vacation and recreation vehicles in area can be attracted to the proposed Apostle Islands National Lakeshore.

Source: Fine, I. V., Apostle Islands, Some of the Economic Implications of the Proposed Apostle Islands National Lakeshore, Wisconsin Vacation-Recreation papers, Volume III, No. I, May, 1965, University of Wisconsin, Madison.

The reliability of this estimate may be tested by comparing it to actual use figures for other park facilities, especially other national forests and parks.

The National Park Service offers the following definitions for the names as applied to national facilities.<sup>14</sup> (Individual states use various classifications, and the names often vary in precise meaning from one state to the next.)

**NATIONAL PARKS** - Spacious land areas essentially of primitive or wilderness character which contain scenery and natural wonders so outstanding in quality that their preservation intact has been provided for by their having been designated and set aside by the Federal Government to be preserved unimpaired for the benefit, enjoyment, and inspiration of the people.

**NATIONAL SEASHORES** - Natural coastal areas set aside for the preservation and public recreation use of their nationally significant scenic, scientific, historic, or recreation values, or a combination of such values. (The term "national lakeshores" has been used recently to designate similar types of proposed areas on the Great Lakes ....)

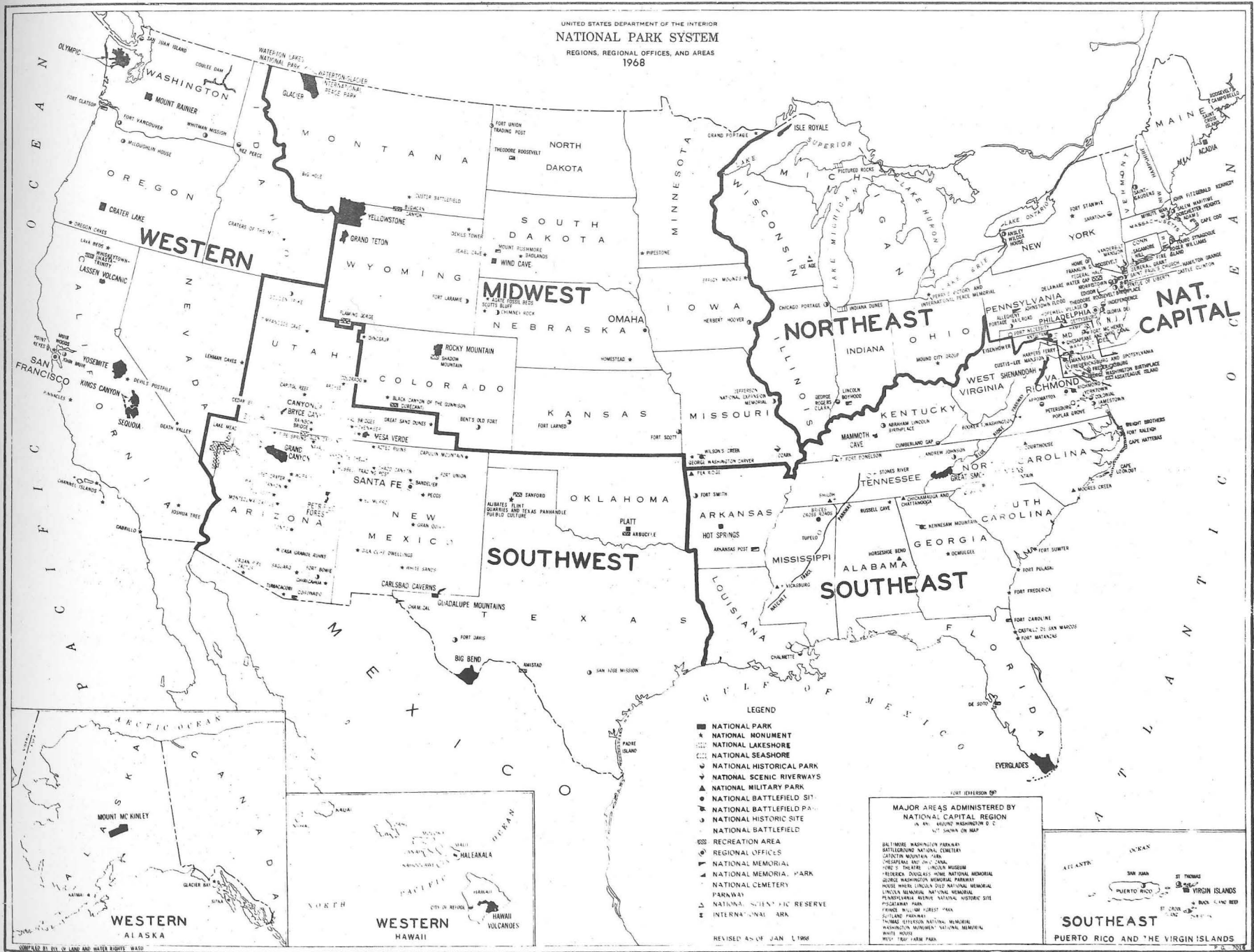
**NATIONAL FORESTS** - Federal lands administered by the Forest Service, U. S. Department of Agriculture, under a multiple-use policy for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.

In addition, (Figure 2) the service maintains the following classes of national areas:

Battlefields	Historic Sites	Recreation Areas
Battlefield Parks	Historic Parks	Seashores
Battlefield Sites	Memorials	Parkways
Cemetaries	Memorial Parks	Capital Park System
Military Parks	Monuments	White House

<sup>14</sup> U. S. Department of the Interior, National Park Service, Parks for America, 1964.

UNITED STATES DEPARTMENT OF THE INTERIOR  
**NATIONAL PARK SYSTEM**  
 REGIONS, REGIONAL OFFICES, AND AREAS  
 1968



**LEGEND**

- NATIONAL PARK
- ▲ NATIONAL MONUMENT
- NATIONAL LAKESHORE
- ▨ NATIONAL SEASHORE
- ▽ NATIONAL HISTORICAL PARK
- ∇ NATIONAL SCENIC RIVERWAYS
- ▲ NATIONAL MILITARY PARK
- NATIONAL BATTLEFIELD SITE
- ◐ NATIONAL BATTLEFIELD PARK
- ◑ NATIONAL HISTORIC SITE
- ◒ NATIONAL BATTLEFIELD
- RECREATION AREA
- REGIONAL OFFICES
- ▲ NATIONAL MEMORIAL
- ▲ NATIONAL MEMORIAL PARK
- ▲ NATIONAL CEMETERY
- ▲ NATIONAL CEMETERY PARKWAY
- ▲ NATIONAL SCIENTIFIC RESERVE
- ▲ INTERNATIONAL AREA

**MAJOR AREAS ADMINISTERED BY NATIONAL CAPITAL REGION**  
 (A. IN WASHINGTON D. C. SEE MAP)

BALTIMORE WASHINGTON PARKWAY  
 BATTLEGROUND NATIONAL CEMETERY  
 CAPITOL MOUNTAIN PARK  
 CHELSEA AND O'CONNOR  
 FORD'S THEATRE LINCOLN MUSEUM  
 FREEDERICK DOUGLASS HOME NATIONAL MEMORIAL  
 GEORGE WASHINGTON MEMORIAL PARKWAY  
 HOUSE WHERE LINCOLN DIED NATIONAL MEMORIAL  
 LINCOLN MEMORIAL NATIONAL MEMORIAL  
 PENNSYLVANIA AVENUE NATIONAL HISTORIC SITE  
 PEGGY MARR  
 PENNSYLVANIA STATE HOUSE  
 POTOMAC RIVER NATIONAL MEMORIAL  
 RICHMOND NATIONAL MEMORIAL  
 WASHINGTON MONUMENT NATIONAL MEMORIAL  
 WASHINGTON MONUMENT NATIONAL MEMORIAL  
 WOODS HOUSE  
 WOODS HOUSE NATIONAL MEMORIAL

**SOUTHEAST**  
 PUERTO RICO AND THE VIRGIN ISLANDS

REVISED AS OF JAN 1 1968

There is a difference in the tone of the definition of the national forest compared to that of the parks and seashores. The latter are oriented to the direct use of the vacationer, while the forests are operated under a "multiple-use policy". The parks and seashores naturally attract a greater number of people than the national forests. Tables 13 and 14 indicate that the facilities and projected attendance for the proposed Apostle Island National Lakeshore are quite comparable to other facilities. Table 15 is presented for informational purposes only.

Figure 3 depicts this tabular information in graph form. Some tendencies are apparent. The state parks and forests are smaller and show much smaller attendance. With the exception of Superior National Forest, the national forests used in the comparison show a concentrated number of visits within a range from about 700,000 man-day visits to about 1 million--despite great variation in size.

There is reason to doubt a strong relationship between a park's size in acres and its attendance. A recent article in the Yearbook of Agriculture reported, for example, that acreage . . . "is a poor indicator of the number of recreation opportunities available. The most popular forms of recreation often require little land."

This point is quite obvious when examining the graphed data for national parks in Figure 3.

Comparing the estimate of 920,000 visits to the Apostle Island Park with either national park visits or national forest visits, Fine's estimate seems quite reasonable.

As a further check upon the reliability of the estimate, actual attendance was compared to population. Census of population data by county was compiled to see if the variance in national park attendance might depend upon the number of people driving within some distance. In this case a distance of 400 miles (or one day's driving time) was used as the radius of a crude circle drawn along county boundaries, around six national parks in addition to the proposed one. One writer finds that approximately 90% of the vacation visitors to an area



TABLE 13. CHARACTERISTICS AND ATTENDANCE AT NATIONAL FORESTS, 1967

Park	Location	Acreage	Special Features							Use			Activities						Attendance in 1000's	Year		
			Lake Reservoir	River	Seashore Forest	Mountains	Biological	Geological	Historical	Day & Weekend Vacation	Out-of-State	Picnicking	Hiking	Camping	Boating	Swimming	Fishing	Hunting			Nature	Winter Sports
Apostle Islands	Unit 1 - Islands	57,511 { 39,941 7,200 10,370	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Apostle Islands	Unit 2 - Bayfield Penn. (Red Cliff Unit)		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	920.0	1972 (Proj.)
Apostle Islands	Unit 3 - Kakagon		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		
Chequamegon Nat'l Forest	N. W. Wisconsin	827,000	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	*779.8	1967
Nicolet Nat'l Forest	N. E. Wisconsin	640,448	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	*823.9	1967
Isle Royale	Lake Superior (Mich.)	540,000			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	**9.5	1967
Ottawa Nat'l Forest	W. Upper Michigan	861,459		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	*679.6	1967
Hiawatha Nat'l Forest	C. Upper Michigan	476,653		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	*1,063.3	1967
Marquette Nat'l Forest	E. Upper Michigan	354,000		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	Not Available	
Superior Nat'l Forest	N. E. Minnesota	1,929,000 (incl. 700,000 water)	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	*2,019.6	1967

Source: \*National Forest Service"

\*\*U. S. Department of the Interior, National Park Service,  
Parks for America, 1964.

TABLE 14. CHARACTERISTICS AND ATTENDANCE AT NATIONAL PARKS, 1967

Park	Location	Acreage	Special Features						Use		Activities						Attendance in 1000's	Year					
			Lake	Reservoir	River	Seashore	Forest	Mountains	Biological	Geological	Historical	Day & Weekend Vacation	Out-of-State	Picnicking	Hiking	Camping			Boating	Swimming	Fishing	Hunting	Nature
Theodore Roosevelt Memorial Park	W. North Dakota	70,374			X			X X X	X X X		X X X	X X X		X			X					*555.8	1967
Wind Cave Nat'l Park	S. W. South Dakota	28,059				X	X X X	X X X	X X X		X X X							X	X			*882.1	1967
Glacier Nat'l Park	N. W. Montana	1,009,000	X	X		X X X X	X X X	X X X	X X X	X X X X	X	X	X				X	X	X			*844	1967
Crater Lake Nat'l Park	S. W. Oregon	160,000 (incl. 12,800 water)	X			X X X X	X X X	X X X	X X X	X X X X X X	X X X						X X X					*499.4	1967
Mt. Rainier Nat'l Park	Cent. Washington (incl. up to 10,000 water)	241,571	X	X		X X X X	X X X	X X X	X X X	X X X				X			X X X					*1,805.9	1967
Grand Teton Nat'l Park	N. W. Wyoming	302,000	X X X			X X X X X	X X X	X X X	X X X	X X X X X X	X	X					X	X				*2,643	1967

Source: \*National Park Service, Parks for America.

TABLE 15. CHARACTERISTICS AND ATTENDANCE AT STATE PARKS IN WISCONSIN, 1967

Park	Location	Acreage	Special Features							Use			Activities							Attendance in 1000's	Year				
			Lake	Reservoir	River	Seashore	Forest	Mountains	Biological	Geological	Historical	Day & Weekend Vacation	Out-of-State	Picnicking	Hiking	Camping	Boating	Swimming	Fishing			Hunting	Nature	Winter Sports	Wilderness
Interstate State Park	N. W. Wisconsin	675	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X			*205.7	1967	
Pattison State Park	N. W. Wisconsin	1,160	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X			*185.5	1967	
Copper Falls State Park	N. W. Wisconsin	1,400			X	X		X		X	X		X	X	X	X	X	X	X				*109.3	1967	
Flambeau River State Forest	N. W. Wisconsin	75,261	X	X	X	X				X	X		X	X	X	X	X	X	X	X	X	X		*18.5	1967
Brule River State Forest	N. W. Wisconsin	25,816	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X		*42.2	1967

Source: \*Bureau of Parks and Recreation, State of Wisconsin.

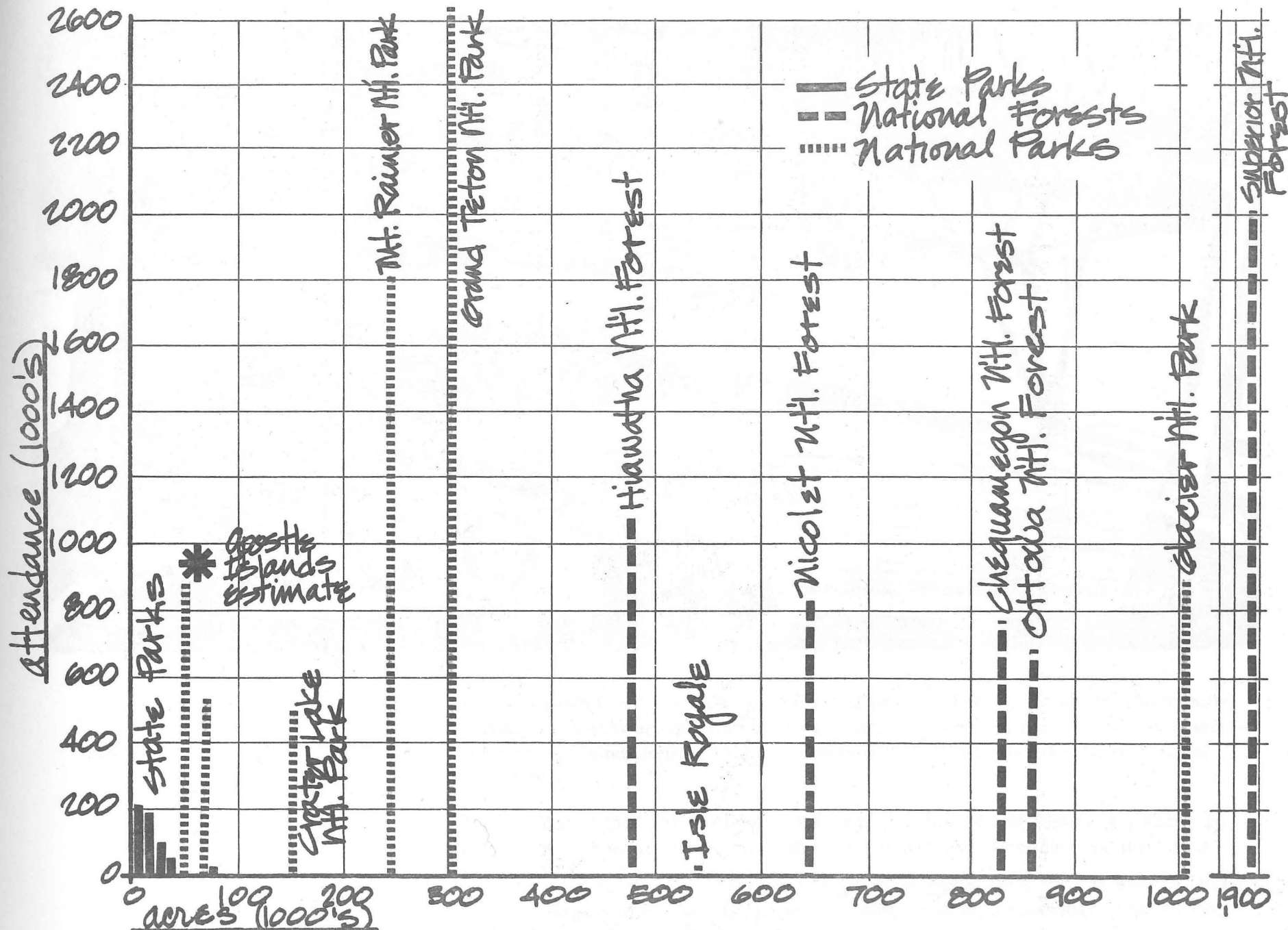
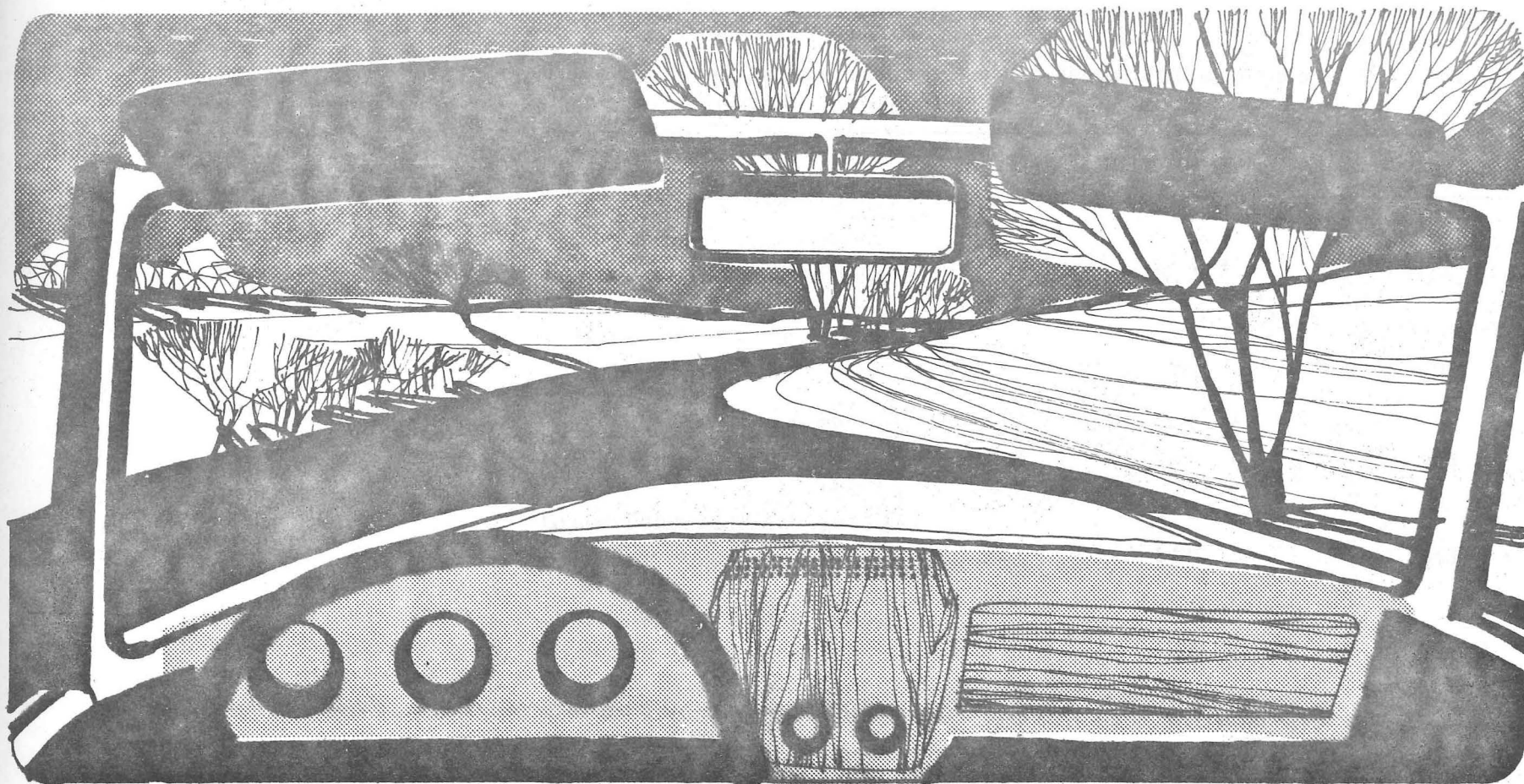


FIG. 3 - RECREATION RESOURCE USE -- 1967



will be drawn from within a 400-mile radius.<sup>15</sup> The six parks are distributed across the northwest quarter of the country and could be expected to show similar climatic conditions. Table 14 shows that they all offer the same general facilities.

The results of this comparison are shown in Table 16 and Figure 4. Table 16 shows 1967 attendance compared to 1960 population -- in each case the latest

<sup>15</sup> Crampon, L. J., An Analysis of Tourist Markets, Business Research Division, Graduate School of Business Administration, University of Colorado, Boulder, Colorado, August, 1964, p. 5.



Table 16. Attendance (in thousands) in Selected Parks, 1960 and 1967, and Population Living within 400 Miles, 1960.

Park	1960 pop.	1960 attend.	1967 attend.
Apostle Islands National Lakeshore, N.W. Wisconsin	19,866	N. A. <sup>a</sup>	N. A. <sup>a</sup>
Crater Lake National Park S.W. Oregon	10,365	398	499
Glacier National Park N.W. Montana	6,350	725	844
Grand Teton National Park N.W. Wyoming	2,861	1430	2643
Mount Rainier National Park Washington	1,926.5	1539	1805
Theodore Roosevelt National Memorial Park, Western North Dakota	3,928	233	555
Wind Cave National Park S.W. South Dakota	4,872	865	882

<sup>a</sup> N. A. -- not available

Source: U.S. Department of the Interior, National Park Service, Public Use of the National Parks; A Statistical Report, 1954-1964, Washington, D. C., 1960.

U.S. Bureau of the Census, Census of the Population, Washington, D. C., 1960

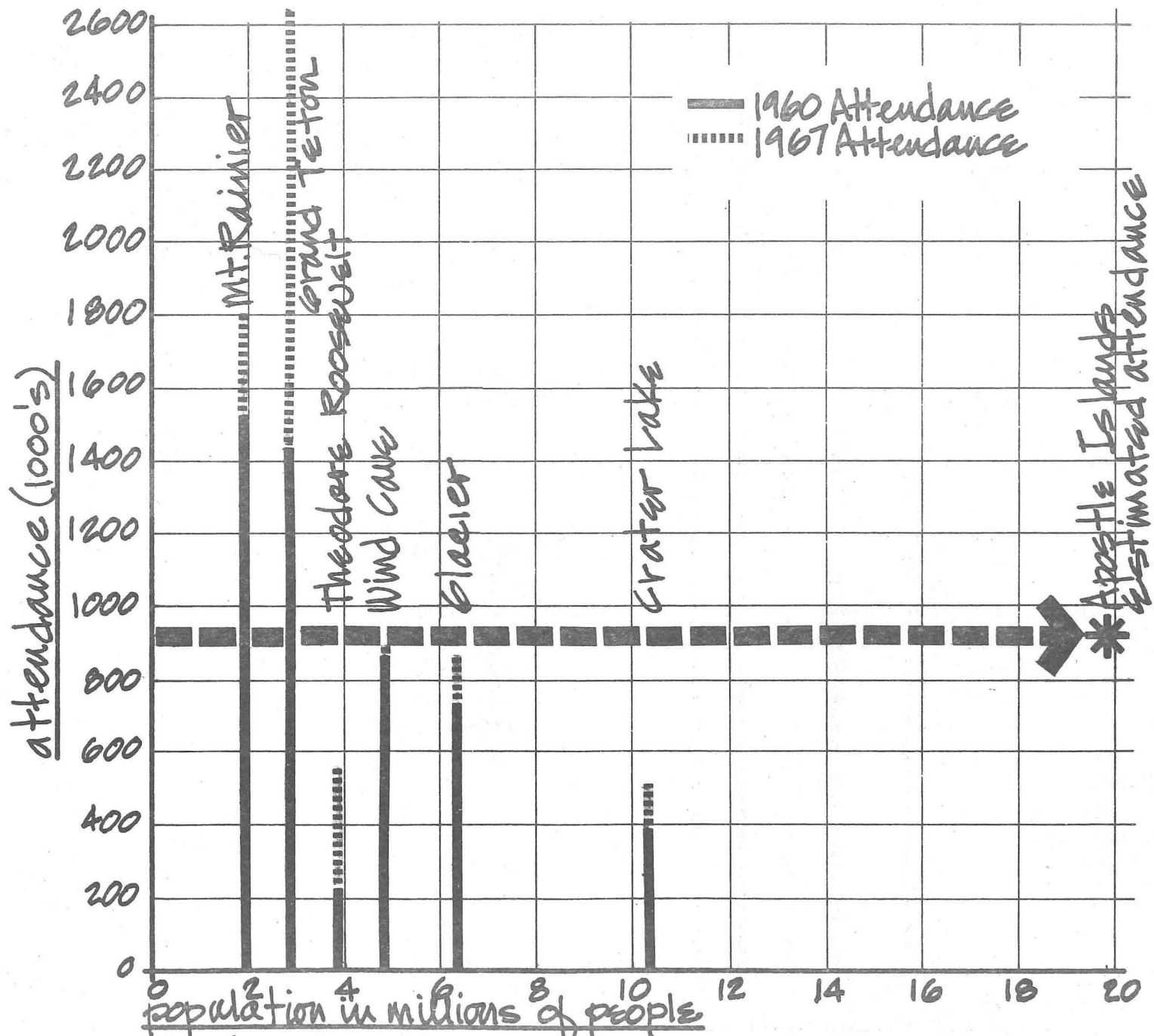


FIG. 4 - ATTENDANCE IN SELECTED PARKS, 1960 & 1967, AND POPULATION LIVING WITHIN 400 MILES.

available figures. In none of the cases were there substantial changes in park size, and within such large circled areas, the rate of population growth can be assumed equal.

Again, the estimate of 920,000 man-day visits to the Apostle Island Park appears reasonable. The park is quite close to the center of the distribution despite the fact that its one-day travel distance encompasses two and three times the population of the comparison parks.

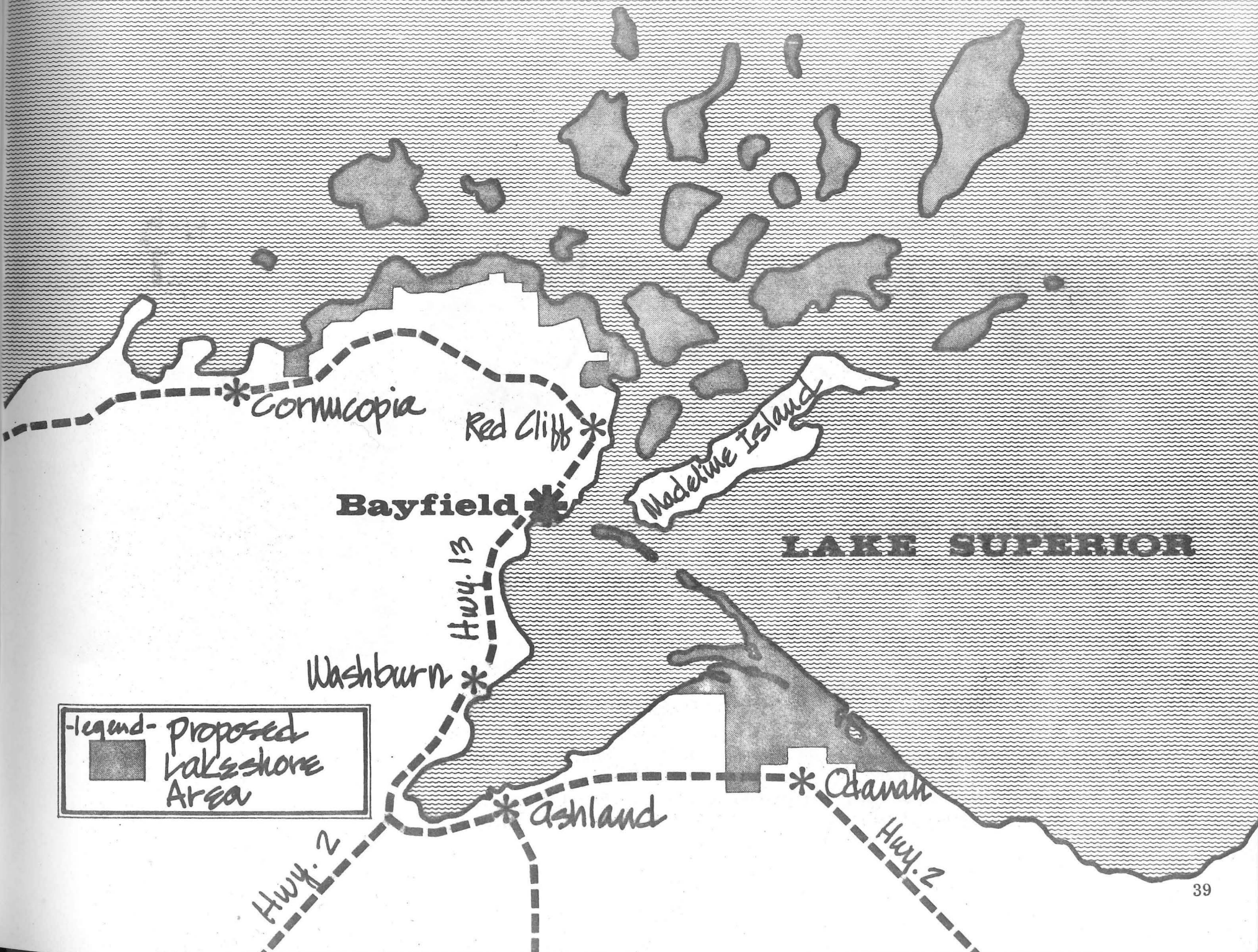
The fact that some parks attract large numbers of visitors with relatively smaller population groups may be due to a cumulative attractability because of their proximity. In fact attendance seems to increase with the proximity to some central point in the Northwest -- possibly Yellowstone Park. The closeness of these parks may permit vacationers to visit several of them in one trip.

Hopefully the population of the proposed lakeshore market area can compensate for this advantage.

The proposed lakeshore consists of three separate units with a total of 57,511 acres (Figure 5). The Apostle Island unit, with 39,941 acres, includes 21 of the 22 islands in the group, omitting Madeline Island which is well settled and occupied year round. The islands are, for the most part, wild and remote. They support a 'lush vegetative cover' and abundant wildlife -- especially white-tailed deer. Development plans include "minimum docking facilities". "Simple campsites, including Adirondack-type shelters, fireplaces and toilet facilities, would be established on certain islands for visitors wishing to spend some time exploring. New hiking trails would be laid out, and existing ones improved."<sup>16</sup>

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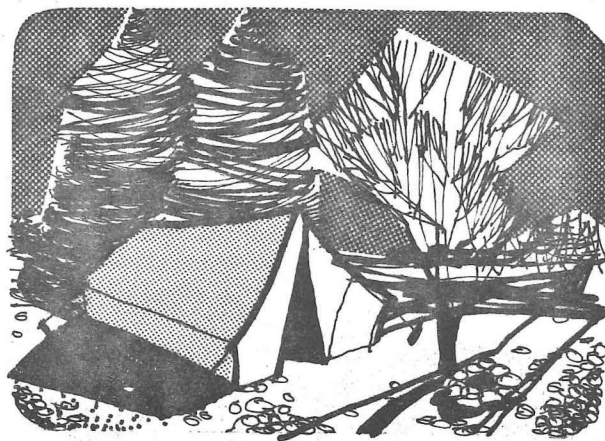
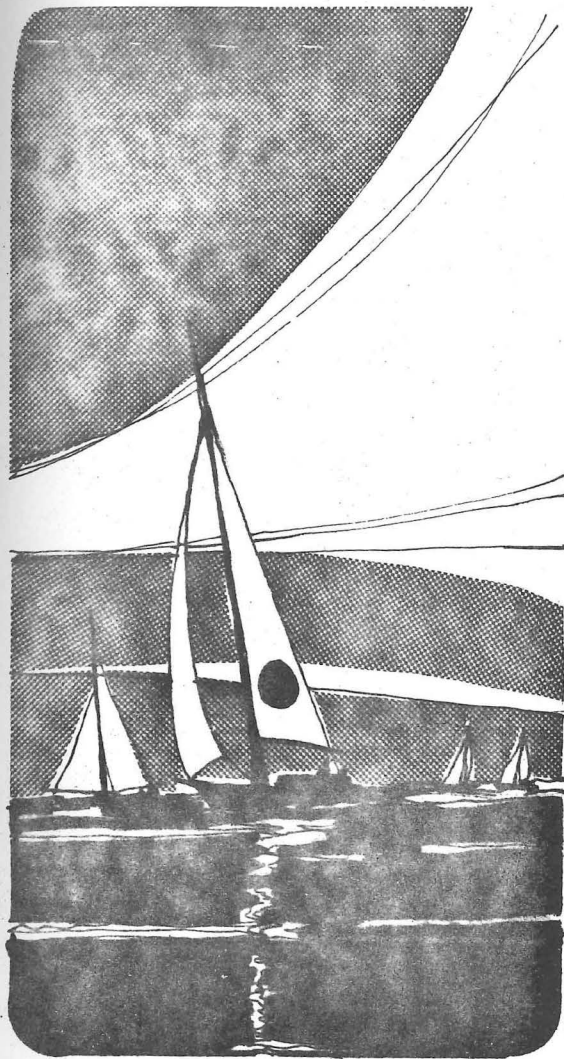
<sup>16</sup> Apostle Islands National Lakeshore, A Proposal, August 1965, prepared by a subcommittee of the North Central Field Committee in accordance with instructions issued by the Secretary of the Interior.



-legend- Proposed  
Lakeshore  
Area

LAKE SUPERIOR





According to the proposal, "most of the Kakagon Bad River unit would be preserved as a unique natural shore and marsh". Recreational activities would include primitive type camping, hiking, some boating, wildlife viewing, hunting and fishing within the 10,370 acres of the sloughs and marshes.

The Red Cliff unit, containing about 7200 acres of the 57,511 total, would consist of a strip along the northern coast of the Bayfield Peninsula running about 30 miles in length and between one-quarter and one-half miles from the lake-shore inland.



". . . the peninsula has a shoreline of great geological interest and scenic beauty. Spectacular arches, caves, cliffs, caverns and bays, eroded from solid rock by wave and stream action over thousands of years, alternate with secluded sand and pebble beaches."

The Red Cliff unit would have strong appeal to tourists. The original proposal called for construction of a 30-mile scenic shoreline drive with entrances off State Trunk Highway 13 at the Red Cliff Indian community on the east and near Cornucopia on the west.

"Pull-off parking areas with interpretive devices and trails leading to points of interest would be spotted along the shore drive, most of which would be paralleled by a hiking trail. Such a short drive would serve as access to seven major developed areas along the route."<sup>17</sup>

These seven developed areas would include facilities for picnicking and camping, fishing, canoeing, hiking and bridle trails, tent and trailer camping, lodges, marinas, natural area interpretation, limited store facilities and residences.

In a later report, the Wisconsin Department of Resource Development stated that the Shoreline Drive plan should be abandoned. Unstable soil conditions would make construction and maintenance too costly. In its place the department recommended direct access through north-south feeder roads from highways 2 and 13, which would presumably "provide for maximum enjoyment of the recreational resources available at the location."<sup>18</sup>

With the Kakagon-Bad River Sloughs unit oriented more toward preserving wild-life, and with access to the Apostle Island unit available almost exclusively through Bayfield (there is a private airport on Madeline Island), it can realistically be expected that the greater part of the visitors (possibly 80%) will be attracted to the Red Cliff unit and the Bayfield Peninsula area.

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<sup>17</sup> Ibid., p. 19

<sup>18</sup> Wisconsin Department of Resource Development, Recreational Potential of the Lake Superior South Shore Area, Madison, 1964.

It should be noted here that the proposal (page 19) suggests that Red Cliff be the Lakeshore headquarters. Because it has "one of the Lakeshore's best harbor locations", it is intended that "Red Cliff would also be the main departure point for boats making commercial excursion trips to the Islands." The city of Bayfield presently hosts the ferry service to Madeline Island and the excursion traffic to the other islands. Bayfield should take whatever steps necessary to maintain this competitive advantage; it is necessary for drawing people into the area.

The Wisconsin State Highway Commission anticipates heavier future traffic along the east side of the Peninsula than along the west side.<sup>19</sup> In its plan for a 1990 functional system, highway 13 from outside Ashland to near Bayfield will be a "standard arterial". From Bayfield west to Cornucopia and down the coast toward Superior, it will be a "minor arterial". (The State Highway plan describes a standard arterial as one which "serves long trips with good mobility at 60 mph. It offers a good level of service under varying operating conditions. The minor arterial serves mixed trips with moderate mobility and considerable land access with speeds around 50 mph, with a variable level of service with mixed operating conditions.)

Further long range plans call for freeways to be built along the route of U. S. 2 between Superior and the Michigan State border, along U. S. 51 from Hurley and Ironwood south to Madison; and along U. S. 53 from Superior south to Eau Claire. Although these plans have been approved by the State Highway Commission (in July and November of 1966) no timetable has been established, and it is entirely possible that the park will be fully operational long before the freeway system is. It is to be expected that improved highways would have an immense effect in the traffic to the park area.

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<sup>19</sup> Wisconsin State Highway Commission, State Highway Plan Progress Report, January, 1967.

Additional Comments are:

"The Red Cliff area unit will probably be the area of maximum use within the lakeshore boundaries. A total of 300 campsites at three locations are planned for this unit."<sup>20</sup>

"It was assumed that each of the vehicles would use State Trunk Highway 13 between Bayfield and the east entrance of the Red Cliff unit. It was also assumed in this projection that most of these vehicles would probably not use this road twice. They would either use State Trunk Highway 13 along Lake Superior in the direction west of Cornucopia or return to Washburn by County Trunk Highway 'C' . . ."<sup>21</sup>

"It is assumed that most of the traffic to the Apostle Island Park would use the Red Cliff unit. However, with the boating facilities of Bayfield and Washburn, the attraction will be greater in that area."<sup>22</sup>

The commission estimates that traffic along the east coast on highway 13 would be nearly three times as great as along the other side to the western county line. Estimates of ADT (average daily traffic) along three segments of highway 13 between Bayfield and Red Cliff and the east entrance of the Red Cliff unit are 2200, 2020 and 1600. From the west entrance through Cornucopia, Herbster, Port Wing to the Bayfield-Douglas county line, the estimates are 600, 750, 750 and 900.

If 80% of the visitors to the general lakeshore area can be drawn to the greater Bayfield Peninsula region, this would mean (.80 x 920,000 = 736,000) man-day visits per year, extending Fine's estimates. In order to estimate expenditures, some further allocation is needed. Of the entire 736,000 man-day visits, some

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<sup>20</sup> Fine, Apostle Islands, Economic Implications, p. 10

<sup>21</sup> State Highway Commission, Progress Report.

<sup>22</sup> Ibid.

will be spent inland, away from the lakeshore. This might amount to about 70,000, or less than 10% of the total vacation-tourist visits. The remaining 676,000 man-day visits would occur along the shoreline, with expenditures being made in each of the communities along the shore -- Port Wing, Herbster, Cornucopia, Sand Bay, Red Cliff, Bayfield and Washburn. Aside from Washburn, which is about 10 miles south of the Red Cliff unit, Bayfield is the largest community in the county. Along with possibly Red Cliff, it is in a good position to capture the business of those who enter the park area from the south and those who vacation nearby. Cornucopia, while considerably smaller, is similarly situated near the western approach.

If Bayfield could extend its sphere of economic influence over 40% of the 676,000 shoreline man-day visits, it would enjoy the expenditures of 270,400, or say, 270,000 man-days of various types of visitors. This is slightly less than 30% of all the 920,000 visits to the entire area. Table 17 compares the seven communities on the shore of the Bayfield Peninsula within the county, that compete for tourist expenditures. A visual inventory indicates that Bayfield probably offers the most commercial facilities.

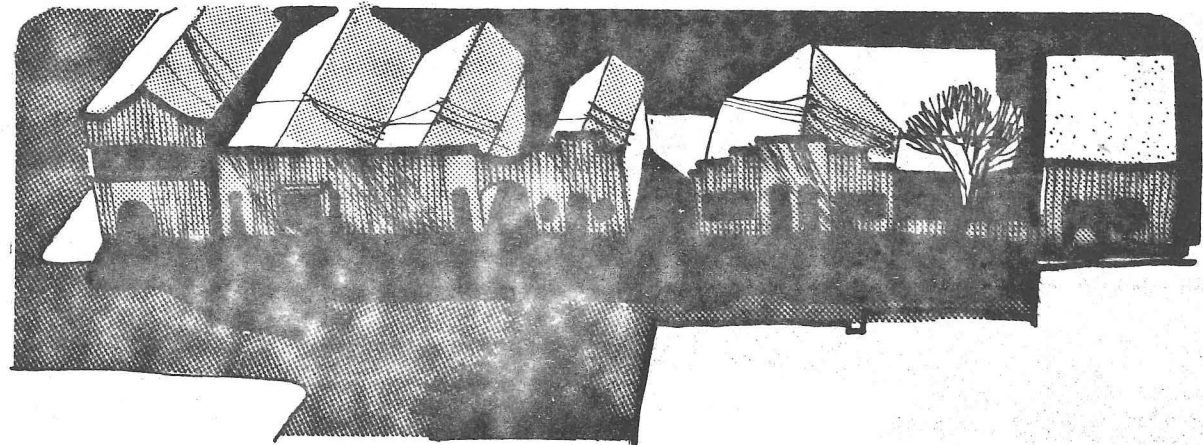


Table 17. Comparison of Observable Commercial Facilities within Seven Communities on the Bayfield Peninsula, August 1968.

	Gasoline service stations	Motels	Groceries	Taverns	Restaurants (all classes)	Mechanical Services	Clothing	Gift shops	Yacht clubs	Excursion boats	Laundromats	Drug stores	Churches
Bayfield	3	5	3	4	5	2	1	2	1	2	2	1	4
Port Wing	3	1	1	2	0	2	0	0	0	0	0	0	3
Herbster	2	1	1	3	0	1	1	0	0	0	0	0	0
Cornucopia	1	2	1	2	2	1	1	0	0	0	0	0	2
Red Cliff Indian Village	0	0	0	0	0	0	0	0	0	0	0	0	1
Washburn	5	2	2	5	4	3	1	1	0	0	2	0	0
Madeline Island (La Pointe)	3	0	1	2	2	1	0	2	0	0	1	0	0



Given an estimate for attendance in 1972, it becomes necessary to project the growth in the years following to get some idea of future needs for recreational and related facilities.

According to the National Park Service, park attendance in all national parks increased from 72,287,000 man-day visits in 1960 to 139,675,000 in 1967.<sup>23</sup> This represents an annual rate of growth of 9.87% compounded annually. For the mid-west and northeast regions the rates are slightly lower -- 8.50% and 9.75% respectively. (The boundary between the two regions is the Wisconsin-Minnesota border.) Projecting past experience into the future, one might expect annual growth in attendance in the Apostle Island Park to approximate 9%.

This estimate may seem extremely high when compared solely to the growth of the nation's population. However, past growth in park attendance has also outstripped population growth. The causes of increased attendance are more than just population growth. Each individual is likely to make greater use of our nation's parks as he enjoys more income and mobility and free time, and as our urban areas encompass a larger amount of our land supply.

One of the most important information sources relating to the recreation industry is the Outdoor Recreation Resources Review Commission.<sup>24</sup> The commission was charged with the task of estimating the nation's need for recreational facilities at the present, in 1976 and in 2000. It was also to take inventory of available resources and recommend policies and programs that would eventually meet these needs. The Commission, commonly referred to as ORRRC, submitted its report entitled, Outdoor Recreation for America, to Congress in January of 1962. Much of the Commission's report was drawn from a series of 27 subsidiary reports submitted by its own staff and various other sources.

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<sup>23</sup> U. S. Department of the Interior, National Park Service, Public Use of the National Parks: A Statistical report, February 1966 and December 1967.

<sup>24</sup> Created by public law 85-470, 72 Stat. 238, 1958.

The ORRRC Study Report #26, Prospective Demand For Outdoor Recreation explores several methods for projecting past annual visits to national parks into estimates of future use.<sup>25</sup> The report settles on a method of extrapolating the observed growth of those particular statistical series which can be shown, through correlation analysis, to be related to man-day visits. Time series analysis reveals a close relationship between the changes in annual visits to national parks and increased population, income, leisure and mobility.

The following regression equation was developed using four variables:

$$X_1 = -7.53 + 2.22 X_2 + 1.35 X_3 + .43 X_4 + .06 X_5$$
 where  $X_1$  = national park visits per 100 persons per year;  $X_2$  = real disposable income in thousands of 1960 dollars per capita;  $X_3$  = mobility in thousands of inter-city passenger miles by automobile per capita;  $X_4$  = leisure time in hours per week per employed person;  $X_5$  = time in years with the base year, 0, being 1945. (The last variable, time, is not merely a measure of the passage of time. It represents all other unspecified variables.)

The regression equation produces a coefficient of determination of 0.9964. Each of the variables taken alone produces a high coefficient of determination, as shown in Table 18.

Various sources that have been drawn upon by the ORRRC subgroups for their subsidiary reports (especially #23) indicate substantial increases in these causative factors. For example, the Bureau of Labor Statistics, U. S. Department of Labor, has estimated that the average work week, for all industry, will decrease from 38.5 in 1960 to 35.4 hours worked per week in 1976 and further to 30.7 in 2000.<sup>26</sup> Average paid vacation will increase from 2.0 to 2.8 weeks in 1976 and 3.9 weeks in 2000. Average number of holidays will increase from 6.3 to 8.5 and then further to 10.1.

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<sup>25</sup> ORRRC, Study Report #26, National Planning Association, Washington, D. C., 1962, complete series available from the Superintendent of Documents.

<sup>26</sup> ORRRC, Study Report #23.

Table 18. Correlation of Park Attendance and Causative Factors

Regression Equation	S	R <sub>2</sub>	Calculated X <sub>1</sub>	
	Standard error of estimate	Coefficient of determination	1976	2000
$X_1 = -7.53 + 2.22X_2 + 1.35X_3 + .43X_4 + .06X_5$	0.260	0.9964	21.0	29.1
$X_1 = -11.07 + 2.52X_2 + 1.47X_3 + .57X_4$	.260	.9962	20.9	28.7
$X_1 = -8.11 + 10.64X_2$	.879	.9530	25.1	36.3
$X_1 = -2.18 + 3.97X_3$	.834	.9576	22.0	29.6
$X_1 = -18.65 + 1.33X_4$	.784	.9626	16.7	22.0
$X_1 = +7.55 + .38X_5$	.483	.9858	19.3	28.4

Source: Outdoor Recreation Resources Review (ORRRC), Study Report #26, Prospective Demand for Outdoor Recreation, National Planning Association, Washington, D. C., 1962, complete series available from the Superintendent of Documents.

Based on data of this nature, it is estimated in ORRRC Report #26 that visits to national parks per 100 persons will amount to 20.98 in 1976 and 29.10 in the year 2000 (Table 19).

Using the regression equation for the single variable of time produces an estimate of visits to national parks per 100 persons for the intermediate years, 1985, of 22.75, and 1970, of 17.05.<sup>27</sup>

With this information it is possible to estimate the future volume of man-day visits to the Bayfield market area (Table 20). The following assumptions are made:

- The estimated 920,000 man-day visits to the Apostle Island National Lakeshore in 1972 is realistic and reliable.
- The estimated 270,000 man-day visits to the Bayfield market area in 1972 is also valid.
- The ratio of Bayfield visitors/Park visitors in midwest states of 6.15% (col. 1) will be constant.
- ORRRC's projections of population and visits per 100 persons are valid.
- The number of people living within 400 miles of Bayfield will continue to be 70.95% of the population of the five selected midwest states.

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$$\begin{aligned} X_{185} &= 7.55 + .38 X_5 & X_{170} &= 7.55 + .38 (25) \\ X_{185} &= 7.55 + .38 (40) & X_{170} &= 17.05 \\ X_{185} &= 22.75 \\ (X_5 &= \text{number of years from base year, 1945}) \end{aligned}$$

Table 19. Population and per capita visits to national parks, real disposable income, travel by automobile and leisure

1930, 1940, 1950, 1960, 1976 and 2000

Year	Population (millions)	Visits to national parks (per 100 persons)	Per capita real disposable income (thousands of 1960 dollars)	Per capita intercity automobile travel (thousands of passenger miles)	Weekly hours of leisure per employed person
<b>Actual</b>					
1930	123.1	2.26	1.13	1.38	15.0
1940	132.0	5.58	1.28	1.88	18.8
1950	151.2	9.20	1.68	2.66	21.6
1960	180.0	13.24	1.96	3.89	23.1
<b>Projected Data</b>					
1976	220.5	20.98	3.12	6.09	26.6
2000	349.2	29.10	4.18	8.00	30.6

Sources for actual (and projected) data: Resident population of continental U. S. used as base in deriving per capita visits, income, and travel--Bureau of the Census (ORRRC Study Report #23, Projections to the years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure and Transportation). ORRRC's population projections are basically the work of the U. S. Bureau of the Census and represent unofficial extrapolations prepared by that Bureau for the use of a committee of the U.S. Senate (86th Congress, 2nd Session, Senate Select Committee on National Water Resources, Committee Print No. 5. "Population Projections and Economic Assumptions", March 1960.) Modifications in this basic series were made by the Bureau of Labor Statistics, a contractor to ORRRC, and by the ORRRC staff.

Visits to National Parks -- U.S. Department of Interior, National Park Service with adjustment of 1960 for comparability with prior years (computed from relationship with per capita income, automobile travel, leisure and "time." See text). Real Disposable Income -- U.S. Department of Commerce, Office of Business Economics (ORRRC Study Report #23). Intercity passenger miles -- Interstate Commerce Commission, adjusted for change in definition in 1937 (ORRRC Study Report #23).

Weekly hours of leisure (see text) estimated from National Recreation Survey, ORRRC Study Report #19 for 1960, and differences from 1960 in: hours worked per week -- U.S. Department of Labor, 1941-1960. 1929-40 estimated from Dewhurst and Associates "American Needs and Resources," (ORRRC Study Report #23).



Table 20. Estimated Population, Visits to National Parks, and Visits to Bayfield Area, 1960, 1972, 1976, 1985 and 2000

	U. S. Population, Millions A	Population in 5 Midwest States <sup>a</sup>		Population within 400 Miles of Bayfield		Visits to National Parks			Visits to Bayfield	
		% U. S. B (C1960/A1960)	number C (1000's)	% 5 states D (E1960/C1960)	number E (DxC)	per 100 F	U. S. G (FxA)	5 States H (FxE)	% I (J1972/H1972)	number J (IxH)
1960	180.0 <sup>c, e</sup>	15.5 <sup>c</sup>	28.028 <sup>c</sup>	70.95 <sup>b</sup>	19.886 <sup>c</sup>	13.24 <sup>g</sup>	23.832	---	---	---
1972	209.5 <sup>h</sup>	17.3 <sup>f</sup>	36.243 <sup>b</sup>	70.95 <sup>d</sup>	25.714	17.05 <sup>b</sup>	35.719	4.384	6.15 <sup>b</sup>	270.000 <sup>d</sup>
1976	229.5 <sup>e</sup>	18.4 <sup>b</sup>	42.203 <sup>e</sup>	70.95 <sup>d</sup>	29.943	20.98 <sup>g</sup>	48.149	6.282	6.15 <sup>d</sup>	386.343
1985	263.1 <sup>h</sup>	17.6 <sup>f</sup>	46.305 <sup>b</sup>	70.95 <sup>d</sup>	32.853	22.75 <sup>b</sup>	59.855	7.474	6.15 <sup>d</sup>	460.000
2000	349.2 <sup>e</sup>	16.2 <sup>b</sup>	56.518 <sup>e</sup>	70.95 <sup>d</sup>	40.099	29.10 <sup>g</sup>	101.617	11.668	6.15 <sup>d</sup>	718.000

<sup>a</sup>Including Illinois, Michigan, Wisconsin, Minnesota and Iowa.

<sup>b</sup>Calculated

<sup>c</sup>Actual

<sup>d</sup>Assumed

<sup>e</sup> Source: ORRRC Study Report #23

<sup>f</sup> Interpolated from preceding and succeeding years

<sup>g</sup> Source: ORRRC Study Report #26

<sup>h</sup> Calculated with an average annual growth rate of 1.53% compounded annually, the rate assumed in the ORRRC projections for 1976 and 2000.

While these two groups are not co-terminous and mutually inclusive, the relationship is necessary because ORRRC's population projections are not available below the state level.

Total actual attendance figures for only the national park units of the National Park Service have not been separately reported since 1954. Since then, attendance figures have been reported for the aggregate (201 different areas in 1964) or for individual areas.

It is interesting to note that the actual attendance figures for three randomly selected years, 1950, 1952 and 1953 were within at most 100,000 visits (out of as many as 17 million) of the product of the population and the calculated per capita rate of visits for those years.

Table 21. Projected Population - Selected Midwest States  
 1976 and 2000  
 (1000's omitted)

	Actual	Projected	
	1960	1976	2000
Illinois	10,081	22,894	19,322
Michigan	7,823	11,615	18,745
Wisconsin	3,952	5,131	7,644
Minnesota	3,414	4,297	6,293
Iowa	2,758	3,266	4,514
TOTAL	28,028	42,203	56,518
United States	180,000	229,500	349,200
Percent of nation	15.5	18.4	16.2

Source: ORRRC Study Report #23, Projections to the 1967 and 2000.

## FORECAST OF TOURIST EXPENDITURES IN BAYFIELD



Proceeding from an estimate of visitors, it is possible to estimate the volume of expenditures they will generate. Marion Clawson, in 1966, summarized a number of surveys of vacationer expenditures.<sup>28</sup> He noted that the studies in general were not careful to define "expenditures", but he presumed that only cash outlays were included and that major equipment purchases were omitted. He also felt that food and other purchases made at home before departure were not included.

On the average, food purchases claimed one-third of the expenditures, lodging took one-fourth, transportation (which he interprets as gasoline and oil for automobiles) accounted for about one-fifth, and "other" made up one-fifth (Table 22).

Based on the traveler expenditure surveys and on other sources, Clawson presented estimated dollar expenditures for various items on a per-person, per-day basis for specified kinds of public recreation areas (Table 23). The per-day expenditures range from \$8.00 for a day visit to a state park to \$15.50 for a visit to a national park. The variances are due to distances primarily. The larger park areas draw a larger number of people from greater distances, thus requiring more expenditures away from home.

Not all expenditures, obviously, are made at the park. Table 24 divides the expenditure according to where it is made. In general, as the visitor gets farther away from his home, he spends more near the park area for groceries, gas and oil, other transportation expenditures, lodging and miscellaneous. Purchases

<sup>28</sup> Clawson, Marion, Economics of Outdoor Recreation, Resources for the Future, Inc.; Baltimore, John Hopkins Press., 1966.

Table 22. Division of Visitor Expenditures on Trips, Selected Areas and States

Survey	Date	Percentage distribution of expenditures			
		Food	Lodging	Transportation	Other
Crater Lake National Park	1950	29.3	31.3	17.8	21.6
Yellowstone National Park	1950	34.4	30.6	24.6	10.4
Shenandoa National Park	1952	36.9	23.8	21.0	18.3
Yosemite National Park	1953	41.1	24.2	19.6	15.1
Grand Canyon National Park	1954	35.6	25.5	22.2	16.7
Great Smoky Mountain National Park	1956	35.2	27.2	14.5	23.0
Average - National Parks		35.4	27.1	20.0	17.5
Arkansas	1949-50	34.0	19.0	23.0	24.0
Washington State	1950	32.0	23.0	20.0	25.0
Kansas	1952	35.5	14.6	37.0	12.9
Colorado	1953	30.8	25.8	25.3	18.1
Pennsylvania	1954	28.0	17.0	23.0	32.0
Virginia	1955	30.4	20.8	23.3	25.5
Arkansas	1956	35.0	20.1	23.3	21.6
Connecticut	1956	36.0	36.0	10.0	18.0
Montant	1958	31.1	23.9	25.4	19.6
Minnesota	1958-59	27.1	36.3	10.6	26.0
Wisconsin	1958	41.0	17.0	14.0	28.0
Missouri	1959	25.0	19.0	28.0	28.0
Wyoming	1960	25.1	25.3	32.9	16.7
Average - State Travel Surveys		31.6	22.9	22.8	22.7
Average - All Surveys		33.5	25.0	22.8	22.7
American Automobile Association	1950		47.0	20.0	33.0
American Automobile Association	1956	28.0	22.0	22.0	28.0
American Automobile Association	1960	36.0	33.0	24.0	7.0

Source: Clawson, Marion, Economics of Outdoor Recreation, Resources for the Future, Inc. Baltimore, 1966.



Table 23. Estimated Expenditure Per Person Per Day, for Visitors to Specified Kinds of Public Recreation Areas, 1960

Items of Expense	National Parks	Other Units of National Park System	National Forests	State Parks	Federal Reservoirs
1. Cash outlay during or immediately preceding visit:					
Food:					
In restaurants	\$ 2.00	\$1.50	\$ 1.75	\$1.00	\$1.00
Groceries	1.50	1.00	1.75	1.00	1.00
Lodging	2.70	1.00	1.50	.50	.50
Transportation:					
Gas and oil	1.50	1.20	1.50	1.00	1.00
Other	.50	.30	.50	.25	.25
Miscellaneous ("other")	1.80	1.00	1.50	.75	1.50
Subtotal	10.00	6.00	8.50	4.50	5.25
2. Reasonable charge for use of equipment:					
Auto	4.00	3.00	3.50	2.50	2.50
Other	1.50	.50	1.50	1.00	2.00
TOTAL, all items	\$15.50	\$9.50	\$13.50	\$8.00	\$9.75

Source: ORRRC Study Report #24, as quoted in Clawson, Outdoor Recreation.

Table 24. Division of Various Kinds of Recreation Expenditures, According to Type of Recreation Area and Location of Expenditure

(Percent)

Item	National Parks			Other units in National Park System			National Forests			State Parks			Federal Reservoirs		
	In or near park	en route	In home com-munity	In or near park	en route	In home com-munity	In or near park	en route	In home com-munity	In or near park	en route	In home com-munity	In or near park	en route	In home com-munity
<b>1. Cash outlays:</b>															
<b>Food:</b>															
In restaurants	40	60	0	50	50	0	50	50	0	65	35	0	65	35	0
Groceries	35	50	15	25	25	50	25	15	60	10	5	85	10	5	85
Lodging	45	55	0	75	25	0	65	35	0	60	40	0	60	40	0
<b>Transportation:</b>															
Gas and oil	30	60	10	30	40	30	30	40	30	20	10	70	25	15	60
Other	30	60	10	30	40	30	30	40	30	20	10	70	25	15	60
Miscellaneous	50	40	10	60	20	20	20	40	40	50	15	35	50	15	35
<b>2. Equipment charge:</b>															
Auto	2	3	95	2	3	95	2	3	95	2	3	95	2	3	95
Other	15	5	80	5	10	85	5	20	75	10	20	70	20	20	60

Source: ORRRC Study Report #24 as quoted in Clawson, Outdoor Recreation, p. 237.



of these goods "en route" also increase. The one Wisconsin-based study referred to by Clawson showed some figures slightly at variance with the averages for traveler expenditures.

#### Expenditures

	<u>% for Food &amp; Drink</u>	<u>% for Lodging</u>	<u>% for Transportation</u>	<u>% for All Other</u>
Average - All Surveys <sup>29</sup>	33.5	25.0	22.8	22.7
State Park Visitor <sup>30</sup>	41	17	14	28
Wisconsin Northern Forest Visitor <sup>31</sup>	40	25	13	22

<sup>29</sup> Ibid.

<sup>30</sup> Hutchins, H. Clifton and Edgar W. Trecker, Jr. The State Park Visitor, A Report of the Wisconsin Park and Forest Travel Study, Wisconsin Conservation Department, 1961.

<sup>31</sup> Clawson, Outdoor Recreation.

Table 25. Estimated Expenditures in Bayfield Area Attributable to Recreation

1	2	3	4	5
Expense Item*	Per Person Per Day*	Total Expense (Col. 2 x 270,000)	% Spent in Park Vicinity**	Dollars spent in Park Area (#3 x #4)
Food:				
In restaurants	\$ 2.00	\$ 540,000	40	\$ 216,000
In groceries	1.50	405,000	35	141,750
Lodging:	2.70	729,000	45	328,050
Transportation:				
Gas & oil	1.50	405,000	30	121,500
Other	.50	135,000	30	40,500
Miscellaneous	1.80	486,000	50	243,000
Other auto expenses <sup>a</sup>	4.00	1,080,000	2	21,600
Other transportation <sup>a</sup>	1.50	405,000	15	60,750
TOTAL	\$15.50	\$4,185,000		\$1,173,150

<sup>a</sup> These are not necessarily cash outlays.

Source: \*ORRRC Study Report #24, as quoted in Clawson, Outdoor Recreation, Table 21.

\*\* Ibid., Table 22.

Hutchins and Trecker reported that the average expenditure within 20 miles of a checkpoint of 17,152 parties interviewed was \$16.38. Although this is slightly greater than the \$15.50 reported by Clawson, Clawson's figures will be used as they are slightly newer (1960 compared to 1958), and they are based on a number of studies, thus avoiding many problems associated with small samples. (The authors point out that their \$16.38 estimate is subject to certain procedural limitations.

Combining the estimates of expenditures-per-person-per-day with the estimated division of those expenditures among various items, it is possible to estimate the expenditures for food, lodging and the other items that will occur within the Bayfield market area (Table 25).

The per-person daily expenditure is assumed to be \$15.50. Currently the expenditure is less than this -- probably around \$8 or \$9 per day as shown in Table 23 for "State Parks" and "Other Units of the National Park System." But when the National Lakeshore is actually commissioned it will truly be a national park as defined earlier. The economic future of the region requires the development of high grade accommodations and attractions, and one strategy emphasizes the importance of drawing visitors who spend more money:

"In many vacation areas outside the region, per capita expenditures are often \$20 or more per day because a higher grade of facilities is offered."<sup>32</sup>

Receipts from tourist-related business vary greatly between seasons. The pattern is described in two works by Professor Fine. In Vacation Patterns of Wisconsin Residents, respondents were asked, in telephone interviews, to indicate the months during which they took their over-night vacation-recreation trips (Table 26).<sup>33</sup> As expected, most trips were concentrated in the three summer months. Approximately 50% of the trips were taken during June, July and August. Winter trips in December, January and February ran in the 3 to 5% range for

<sup>32</sup> Checchi and Company, Commercial Tourism.

<sup>33</sup> Fine, I. V. and E. E. Werner, Vacation Patterns of Wisconsin Residents, Volume I, No. 5, Wisconsin Vacation-Recreation Papers, 1960.



Table 26. Monthly Visits to Selected National Parks as Percentage of Year's Total

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
National Park System	2.7	2.8	4.4	7.8	8.8	13.0	18.1	17.7	8.8	7.4	4.5	3.3
Glacier Mont.		.1	.2	.4	4.2	12.8	38.1	34.1	9.1	.8	.1	
Grand Portage N. E. Minn.	.1	.1	.1	1.4	5.0	11.0	28.7	30.4	18.4	4.3	.4	.1
Grand Teton Wyo.	.1	.2	.3	1.5	4.9	17.5	30.9	28.1	10.2	3.7	2.4	.2
Isle Royale N. W. Mich.					1.6	12.2	38.2	44.1	3.7			
Mount Rainier W. Wash.	1.2	2.0	1.5	2.9	5.7	11.4	22.1	22.8	15.1	7.7	5.5	2.0
Wind Cave S. W. S. Dakota	1.4	1.6	3.0	3.3	5.8	13.4	27.5	24.7	9.7	5.0	2.0	2.0
*Months when Milwaukee residents took overnight trips	2.9	3.7	3.8	4.0	5.8	13.3	21.7	20.4	8.5	5.5	5.6	4.8
**Months in which Wisconsin residents took their main vacation	.5	1.2	1.0	.7	.9	13.2	30.3	33.0	5.2	2.7	.7	.6

Sources: U.S. Department of the Interior, Monthly Percentages of the 1966 Visit Totals, National Park Service, Division of Management Analysis, Branch of Statistics Analysis, Sept. 1967.

\*Fine, I. V. and E. E. Werner, Vacation Patterns of Wisconsin Residents.

\*\*Fine and Werner, The Wisconsin Vacationer, Volume I, No. II, Wisconsin Vacation Papers, 1960.  
(Based on a sample of 1222) (adds to 90% as 10% said "varies")

each month. Respondents were asked for the month in which trips were taken without regard for the length of the trip. Thus, long vacation trips were counted as heavily as single overnight visits to friends or relatives.

Probably a better representation of the distribution of recreation-vacation travel and spending is in The Wisconsin Vacationer.<sup>34</sup> These respondents were asked for the month in which they took their main vacation. The answers to this question show a greater tendency to the summer months than they did to the previous question, probably because few people take their main vacation in winter, though many take some trip then (Table 26).

Figures for monthly attendance for the entire National Park System and selected individual parks within the system are also shown in Table 26. The individual parks were selected because they lay in approximately the same latitude as Bayfield and their weather is similar. They also offer similar attractions -- sight-seeing and outdoor relaxation.

Because the Fine and Werner percentage figures from The Wisconsin Vacationer were computed from a relatively small sample (1222 people), the monthly figures vary somewhat from a smooth distribution. To overcome this and to develop an index for distributing expenditures throughout the year, the seasonal index of Grand Portage Park was adopted. The pattern for this park shows the greatest resemblance to that of Wisconsin residents. The park is very close (about 100 miles North-north-east, in the tip of Minnesota) and serves the same general market region.

Table 27 presents the estimated recreation-travel expenditures in the Bayfield area according to this monthly distribution.

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<sup>34</sup> Fine and Werner, Wisconsin Vacationer

Table 27. Monthly Distribution of Estimated Recreation  
Travel Expenditures - Bayfield City Area - 1972

	Dec. - Mar.	April	May	June	July	August	Sept.	Oct.	Nov.	Total
Index	.1	1.4	5.4	11.0	28.7	30.4	18.4	4.3	.4	100.0
Food:										
In restaurants	216	3,024	11,664	23,760	62,000	65,664	39,744	9,288	864	216,000
In groceries	141	1,984	7,654	15,600	40,682	43,092	26,082	6,095	567	141,750
Lodgings:	328	4,593	17,714	36,085	94,150	99,727	60,361	14,106	1,312	328,050
Transportation:										
Gas and oil	121	1,701	6,561	13,365	34,870	36,936	22,356	5,224	486	121,500
Other	40	56	2,187	4,455	11,623	12,312	7,452	1,741	162	40,500
Miscellaneous	243	3,402	13,122	26,730	69,741	73,872	44,712	10,449	972	243,000
Other auto expense	21	302	1,166	2,376	6,199	6,566	3,974	929	86	21,600
Other transportation	61	878	3,390	6,908	18,026	19,090	11,554	2,700	250	60,750
TOTAL	1,173	16,424	63,350	129,046	336,694	356,637	215,859	50,445	4,692	1,173,150 <sup>a</sup>

<sup>a</sup> Total of monthly distribution is greater due to rounding.

As ORRRC's expenditure figures are stated in terms of 1960 prices, it is necessary to restate them after adjusting for price changes. The Bureau of Labor Statistics reports a consumer price index (with the base years 1957-59 = 100) with selected items reproduced in Figure 6.

Assuming that the National Lakeshore will open in 1972, the prices of 1960 must be extended by twelve years. This is done by doubling the change in the six years from 1960 to 1966 (Table 28).

The following adjustments were made, and the data are presented in Table 29. The 1972 projection for "All Items" of 126.2 was used to adjust lodgings and miscellaneous expenditures. The projection for "Food Away from Home" was used for Food -- both in restaurants and in groceries. The index for private transportation was used to adjust all transportation and auto expense items.

prices

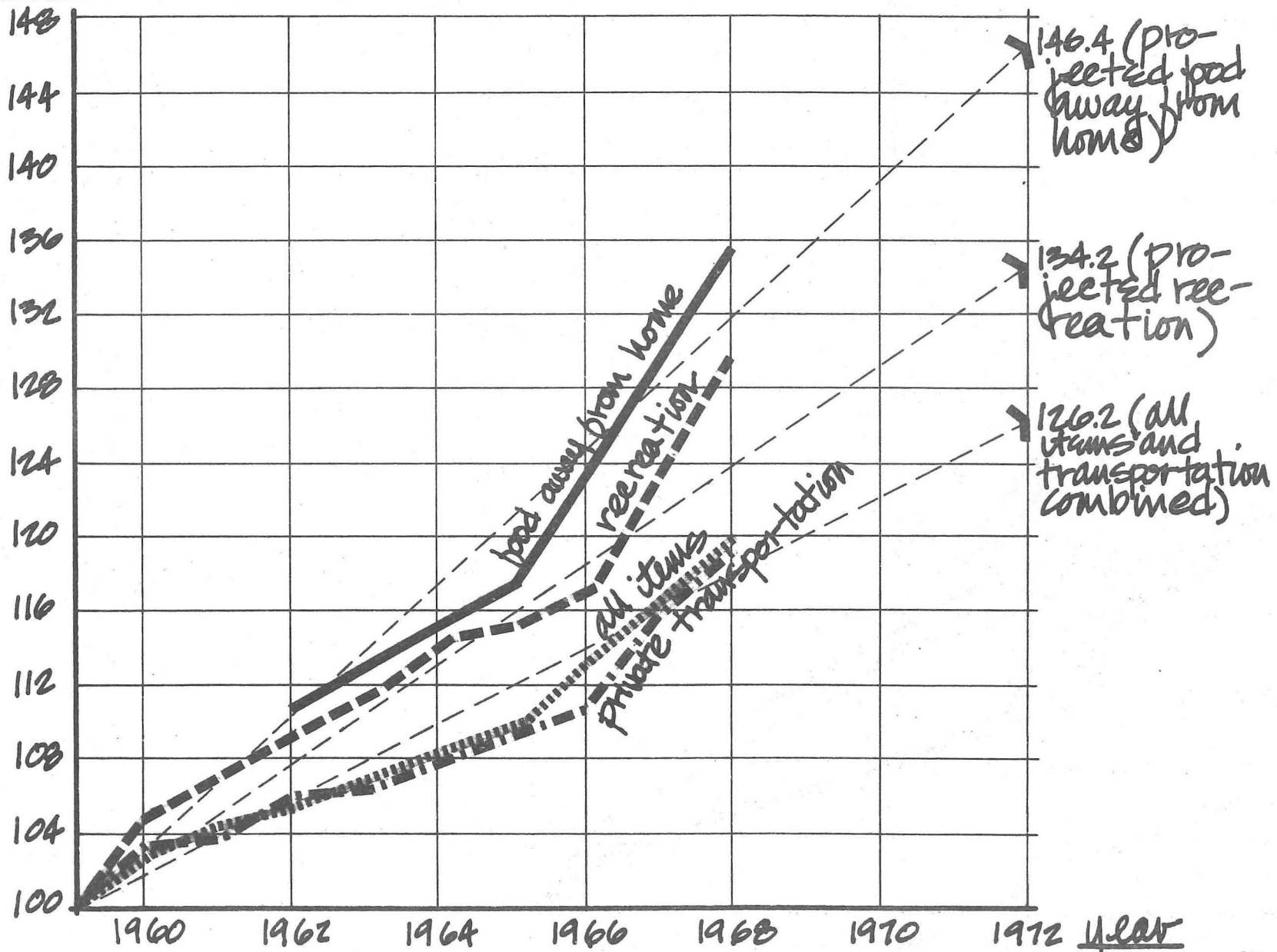


FIG. 6 - CONSUMER PRICE INDEX - SELECTED ITEMS 1959-1972



Table 28. Consumer Price Index 1961-1968 (Annual Average)

	All Items	Food Away From Home	Private Transportation	Recreation
1960	103.1	N. A. <sup>a</sup>	103.2	104.9
1961	104.2	N. A. <sup>a</sup>	104.0	107.2
1962	105.4	110.7	105.9	109.6
1963	106.7	113.2	106.4	111.5
1964	108.1	115.2	107.9	114.1
1965	109.9	117.8	109.7	115.2
1966	113.1	123.2	111.0	117.1
1967	116.3	129.3	115.9	123.8
1968	121.2	136.3	119.6	130.0
1972 <sup>b</sup>	126.2	146.4	122.0	134.2

<sup>a</sup> N. A. -- not available

<sup>b</sup> Projected

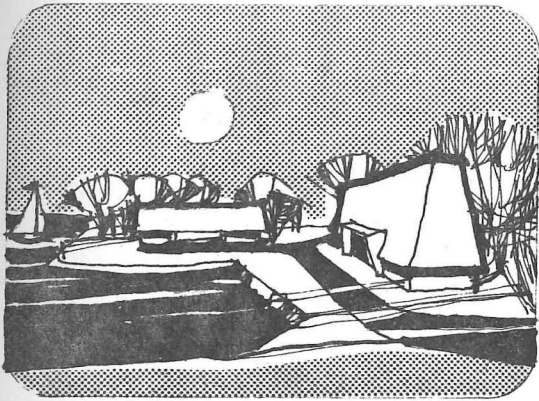
Source: U. S. Department of Labor, Bureau of Labor  
Statistics, Monthly Labor Review, December 1962.

Table 29. Monthly Distribution of Estimated Recreation  
Travel Expenditures - Bayfield City Area -  
1972 Adjusted for Price Increases

	Dec. - Mar.	April	May	June	July	August	Sept.	Oct.	Nov.	Total
Index	.1	1.4	5.4	11.0	28.7	30.4	18.4	4.3	.4	100.0
Food:										
In restaurants	300	4,400	17,100	34,800	90,800	96,100	58,200	13,600	1,300	316,200
In groceries	200	2,900	11,200	22,800	59,600	63,100	38,200	8,900	800	207,500
Lodgings:	400	5,800	22,400	45,600	118,800	125,900	76,200	17,800	1,700	414,600
Transportation:										
Gas and oil	150	2,100	8,000	16,300	42,500	45,100	27,300	6,400	600	148,200
Other	50	700	2,700	5,400	14,200	15,000	9,100	2,100	200	49,400
Miscellaneous	300	4,300	16,600	33,800	88,000	93,200	56,400	13,200	1,200	306,700
Other auto expense	25	370	1,400	2,900	7,600	8,000	4,800	1,100	100	26,300
Other transportation	75	1,100	4,100	8,400	22,000	23,200	14,100	3,300	350	74,100
TOTAL	1,500	21,670	83,500	170,000	443,500	469,600	284,300	66,400	6,250	1,546,700 <sup>a</sup>

<sup>a</sup> Total of monthly distribution is greater due to rounding.

# FEASIBILITY OF NEW INVESTMENT IN BASIC TOURIST SERVICES



## Overnight Facilities

The projections show that approximately \$414,600 will be spent annually for lodgings in the park's early years. As this is likely to require a substantial increase over the present stock of overnight facilities, it becomes important to estimate the type of lodgings that will be needed.

During the 1960's the type of overnight facility that was most popular with tourists was the resort-rental cottage. The resort without meals was most important for the majority of vacationers involved in one state-wide study.<sup>35</sup> Hotels and motels were relatively unimportant except for skiers -- who make up a very small percentage of the total visitors. Another study developed a similar pattern in three Wisconsin counties in which a total of 2631 people were interviewed (Table 30).<sup>36</sup> Over one-third of the vacationer-tourists used resort-rental cottages. Nearly half used either a private cottage or home. Camping, which is becoming increasingly more popular, was used by 8.8% of the vacationer-tourists. Motels were used by 7.6%, and 4.8% used hotel, tourist home, etc. More recently, mobile homes, elaborate camping trailers and motor homes are being used by many vacationers.

From these studies, it is apparent that the most popular type of overnight accommodation at the present time is the resort with rental cottages. Hotels and motels are presently not heavily utilized.

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<sup>35</sup>Fine and Werner, Tourist-Vacation Industry.

<sup>36</sup>Littlefield, Recreation in Wisconsin.

Table 30. Type of Lodging Used by Type of Person Interviewed  
3 County Total

Lodging Type	<u>Person Type</u>							Total
	Vacationer tourist	Summer resident	On business	Passing through	Visiting friends and relatives	Other	American Baptist Assembly	
Resort-rental cottage	37.2%	4.7%	5.6%	--	1.6%	12.8%	--	28.4%
Private cottage	23.6	57.4	--	4.3%	9.7	2.1	0.7%	24.5
Private home	18.0	29.9	13.9	10.9	80.7	27.7	--	21.3
Motel	7.6	--	58.3	52.2	4.0	8.5	--	7.6
Camp site	8.8	0.3	2.8	23.9	--	2.1	1.5	7.1
American Baptist Assembly	--	--	--	--	--	2.1	97.8	5.2
Other - Hotel, tourist home, etc.	4.8	7.7	19.4	8.7	4.0	44.7	--	5.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-local respondents	1943	298	36	46	124	47	137	2631

However, in light of the many adverse comments about resorts made by the owners in various studies, it is doubtful that private entrepreneurs can be induced to expand facilities to any significant extent. Present operations suffer from obsolescence and high maintenance costs, high property taxes, and very low profits. Construction costs are very high per unit. The owners complain bitterly of paying taxes for a full year on property that is productive for only part of the year. They report an abundance of resorts for sale in the northern parts of the state.

The main appeal of the rental resorts is not profit or growth of investment but a leisurely way of life. The owner-operators are under-capitalized and generally unable to make repairs or improvements. As the knowledge of their problem spreads, the number of buyers will dwindle. Investors will become wary of further investments in this area despite their apparent popularity with vacationers.

But a resort-motel operation might be more likely to succeed. Frequently as part of a chain operation, these units are well financed, enjoy economies of scale, and have the necessary professional talents. Design alterations would be necessary in the case of most chain structures to make their appearance blend with Bayfield's visual quality.

Table 31 analyzes the 1967 operating results for 75 resort hotels by five vacation areas of the United States. Because all the hotels included in the study were year-round operations, certain adjustments to the data were necessary.

Harris, Kerr, Forster and Company's figures are representative of resort hotels in the Central states. The average rate per room per day was \$14.79 for all of the resort hotels in the central section. (A representative of a major facility in Bayfield reported an average rate of \$14.00.) This will probably increase to \$20.00 or more by 1972. The average size was 158 rooms, with 48.5% occupancy.

In order to use the year-round operating ratios to simulate a seasonal facility, the expenses were separated into variable and fixed (Table 32). Variable expenses will equal approximately 65% of sales; that part of total expenses which



Table 31. Resort Hotels -- 1967 Results of Operations and Ratios

Explanation	All resort hotels	Central
Total sales and income:		
Rooms	50.5%	51.0%
Food (including sundry income)	32.7	35.1
Beverages (including sundry income)	11.7	7.3
Telephone	1.5	1.8
Other departmental profits	2.3	1.7
Other income	<u>1.3</u>	<u>3.1</u>
Total	100.0	100.0
Cost of goods sold and departmental wages and expenses:		
Rooms	15.6	14.7
Food and beverages	37.4	34.1
Telephone	<u>2.4</u>	<u>2.8</u>
Total	<u>55.4</u>	<u>51.6</u>
Gross operating income	44.6	48.4
Deductions from income:		
Administrative and general expenses	9.0	7.4
Advertising and sales promotion	5.1	5.4
Heat, light and power	3.3	5.0
Repairs and maintenance	<u>6.0</u>	<u>5.9</u>
Total	23.4	23.7
House profit	21.2	24.7
Store rentals	<u>1.5</u>	<u>.3</u>
Gross operating profit	22.7	25.0
Fire insurance and franchise taxes	<u>.6</u>	<u>.8</u>
Profit before real estate taxes and other capital expenses	22.1	24.2
Real estate taxes	<u>3.1</u>	<u>2.5</u>
Profit before other capital expenses	<u>19.0</u>	<u>21.7</u>
Percentage of occupancy	66.8	59.0
Average rate per room per day	\$22.38	\$14.79
Average daily room rate per guest	12.35	8.41
Number of guests per occupied room	1.81	1.76
Times real estate taxes earned	7.1	9.8
Average size (rooms)	266	158

Source: Harris, Kerr, Forster and Company, Trends in the Motel-Hotel Business, Chicago, 1967.

Table 32. Breakdown of Costs for a Seasonal Resort Hotel. As a percent of sales.

	Average in central area <sup>a</sup>	Assumed for a seasonal resort motel in Bayfield	
		Variable <sup>b</sup> expenses	Fixed <sup>b</sup> expenses
Cost of goods sold and departmental wages and expenses:			
Rooms	14.7	14.7	
Food and beverages	34.1	34.1	
Telephone	2.8	2.8	
Total	51.6	51.6	
Gross operating income	48.4	48.4	
Deductions from income			
Administrative and general expenses	7.4	1.4	6.0
Advertising and sales promotion	5.4	5.0	.4
Heat, light and power	5.0	2.7	2.3
Repairs and maintenance	5.9	2.9	3.0
Fire insurance	.8		.8
Real estate taxes	2.5		2.5
Total deductions	27.0	12.0	15.0
Total expenses		63.6	15.0 78.6 <sup>c</sup>

<sup>a</sup> Source: Harris, Kerr, Forster and Company, Motel-Hotel Business, p. 28.

<sup>b</sup> Estimated

<sup>c</sup> 78.6% total expenses would leave a 21.4% "Profit Before Other Capital Expenses" (including Depreciation, Rent, Interest, Amortization, and Income Taxes). Harris, Kerr & Forster showed 21.7% for this respective figure which included .3% Store Rentals (but on a year-round sales).

are fixed will consume about 15.6% of sales per year, distributed evenly throughout the year.

Following are the expected operating results, based on these cost estimates, of several resort motels of sizes selected at random (Table 33). The prevailing room rate of \$14.00 per day was projected to \$20.00 and used with the current estimated seasonal pattern as developed earlier.

As an upper limit, if \$414,600 were spent for lodgings, with a peak of \$125,900 spent in the single month of August, a single facility could absorb the entire volume if it had 210 units; (assuming 30 days occupancy; 210 units x \$20.00 per day x 30 days = \$126,000). The results of operations are shown in Table 34 for motels of 210 and 90 units. Peak seasonal revenue is reduced to the maximum allowed by full occupancy.

It is doubtful that any resort-motel owner would be willing to rely on the entire potential spending to sustain his facility. This would leave him highly vulnerable to market fluctuations. Probably he would rather attract no more than 66% of the business and enjoy greater market security, leaving the rest of the business for competitors or townspeople with extra rooms. In this event a 90-unit resort motel would be warranted. (Total room sales of 90 units are projected at \$263,250; 66% of the potential room sales of \$414,600.) A 90-unit installation is too small for generating significant convention business, but such midweek fall or winter trade would be very speculative.

A 90-unit resort motel would cost between \$8,000 and \$9,000 per unit<sup>37</sup> plus land (about 2½ acres). This is a pro-rated cost which includes the cost of furnishings, the restaurant and all related equipment. This would amount to about \$810,000 using the high figure. Land purchase might raise the total cost to \$850,000.

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<sup>37</sup> As reported by Holiday Inns of America.

Table 33. Estimate and Seasonal Distribution of Lodgings Expenditures in  
Early Life of Park

Month	Seasonal index	Expenditure
January	.1	\$ 400
February	.1	400
March	.1	400
April	1.4	5,800
May	5.4	22,400
June	11.0	45,600
July	28.7	118,800
August	30.4	125,900
September	18.4	76,200
October	4.3	17,800
November	.4	1,700
December	.1	400
TOTAL	100.0	\$414,600

The motel would pay real estate taxes amounting to at least 2.5% of gross sales.<sup>38</sup> This would involve nearly \$13,000 per year ( $.025 \times \$516,200 = \$12,900$ ). Payroll and related expenses amount to about 30% of room sales, (\$79,000) and 45% of food and beverage sales,<sup>39</sup> (\$98,500) or a total of \$177,500 per year for both.

In 1968, real and personal property in the city of Bayfield was assessed at 50% of market value and taxed at the rate of \$65 per thousand of assessed value.<sup>40</sup> If this rate were applied to a new resort hotel, it would result in an assessed valuation of \$425,000 with actual annual taxes of \$27,625. This is the amount of taxes assumed in estimates to follow.

If a resort motel produced net income before other capital expenses of \$110,000 (Table 34) allowing for the standard 2.5% of gross sales for property taxes, then the net income would be \$95,775 after the additional property taxes indicated by current city of Bayfield rates. With debt financing of 65%, nearly \$300,000 of equity capital would be required ( $35\% \times \$850,000 = \$297,500$ ). A return of \$95,000 would be adequate to attract a \$300,000 investment. (In "What's In It For Me?", a pamphlet about its franchising program, Holiday Inns of America, Inc. reports: "With a typical 120 room inn, you will have approximately 33% equity and can expect 6 to 10% return on your total investment, and between 18 to 30% return on your equity.")

Assuming that an operator will want only two-thirds of the business, there remains over \$150,000 in overnight accommodations demand unfulfilled by the new facility. This business will be picked up primarily by the present operators. The development plan suggested that nearby residents open their extra rooms to tourists. This would absorb any excess demand. While it would provide extra income to these residents, the implications for property taxes and additional payrolls are not clear.

<sup>38</sup> Harris, Kerr, Forster and Company, Trends in the Motel-Hotel Business, Chicago, 1967. Nationwide, all resort hotels pay about 3.1% of gross sales for real estate taxes.

<sup>39</sup> "Expenses in Retail Businesses," Marketing Services Department, The National Cash Register Company, Dayton, Ohio.

<sup>40</sup> Letter of July 29, 1969, Bayfield City Assessor.



Table 34. Summary of Pro Forma Operating Statements

	%	210 Units	90 Units
<b>Sales</b>			
Room	51.0	\$414,600	\$263,250
Food and beverage	42.4	344,700	218,900
Other	6.6	53,600	34,100
TOTAL	100.0	\$812,900	\$516,200
<b>Expenses</b>			
Variable	63.6	517,000	328,300
Fixed	15.0	121,900	77,400
TOTAL	78.6	\$638,900	\$405,700
Profit before other capital expenses		\$174,000	\$110,500

### Food Services

Food expenditures, in 1972 dollars, are projected at \$316,000 in restaurants and \$207,000 in groceries. It has been estimated that \$218,900 could be spent in the resort-motel restaurant, leaving \$97,300. One study of food and beverage restaurants reported that the average 1966 sales per seat for all restaurants in the study was \$1418 in food and \$447 in beverages, or a total of \$1865.<sup>41</sup> Adjusted by the projected consumer price index, this will be \$2300 in terms of 1972 prices. (A 23.2% change in six years.) At this rate, 40 seats would be required to accommodate the volume. ( $\$97,300 \div \$2300 = 40.7$ ) In view of the presently existing capacity, no new restaurant facilities would be required, above those in a motel or hotel, for several years.

In about five years after the opening of the park, Bayfield will enjoy an additional 100,000 or more visits annually (Table 20). Where the average per-person, per-day restaurant expenditure in 1960 was \$2.00, this has increased by 23% in the six years between 1960 and 1966 and might be expected to increase 23% more in each of two six-year intervals between 1966 and 1978, bringing the per-person expenditure to \$3.40, or, about 70% greater than the 1960 rate. This would lead to an estimated volume of about \$340,000 in about 1978. If the sales-per-seat ratio of \$2300 in 1972 increases also by 23%, it will be \$2829 in 1978. Based on the 1960 relationship of sales to seats (which very well may not apply nearly 20 years later), it would appear that an additional 120 seats might be warranted then, ( $\$340,000 \div \$2829 = 120.1$ ) in one or more establishments.

In 1966, restaurants, on the average, paid about 30% of total sales in payroll and only 0.7% for property taxes.<sup>42</sup> In terms of an additional \$340,000 in restaurant sales, this would amount to \$102,000 in payroll and \$2380 in property taxes in about 1978.

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<sup>41</sup> The Accountant, Vol. 48, No. 1. March 1968. Lavanthol, Krekstein, Horwath and Horwath, New York, New York.

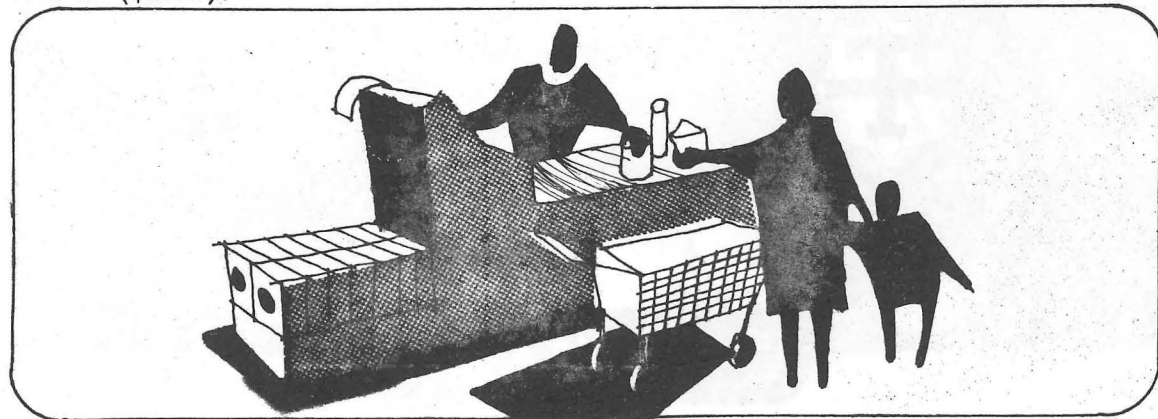
<sup>42</sup> Ibid.

Grocery expenditures of \$207,500 in about 1972 will probably not justify significant expansion of food stores.

Estimated sales per week for the ideal supermarket would be \$35,000 in 1967 dollars, or \$43,000 in 1972 dollars.<sup>43</sup> During the course of a year this would total over 2.2 million dollars --over ten times the volume projected for the Bayfield market area. Clearly, the Super Market Institute's "ideal supermarket" with 20,000 square feet, 7 checkstands and 17 full-time employees, will not develop for many years.

The projected volume will require either a modest food store or expansion of an existing business.

Annual gross sales of \$207,500 could be expected to generate 5.51% gross wages (about \$11,400) not including the proprietor's wages and 83% in taxes and licenses (\$1720).<sup>44</sup>



#### Automotive Services

Total "gas and oil" sales for the year 1972 are estimated to be \$148,200 with a maximum of \$45,100 in August. "Other" transportation expenditures --tires and accessories --will amount to \$49,400 for the year, peaking at \$15,000 in August.

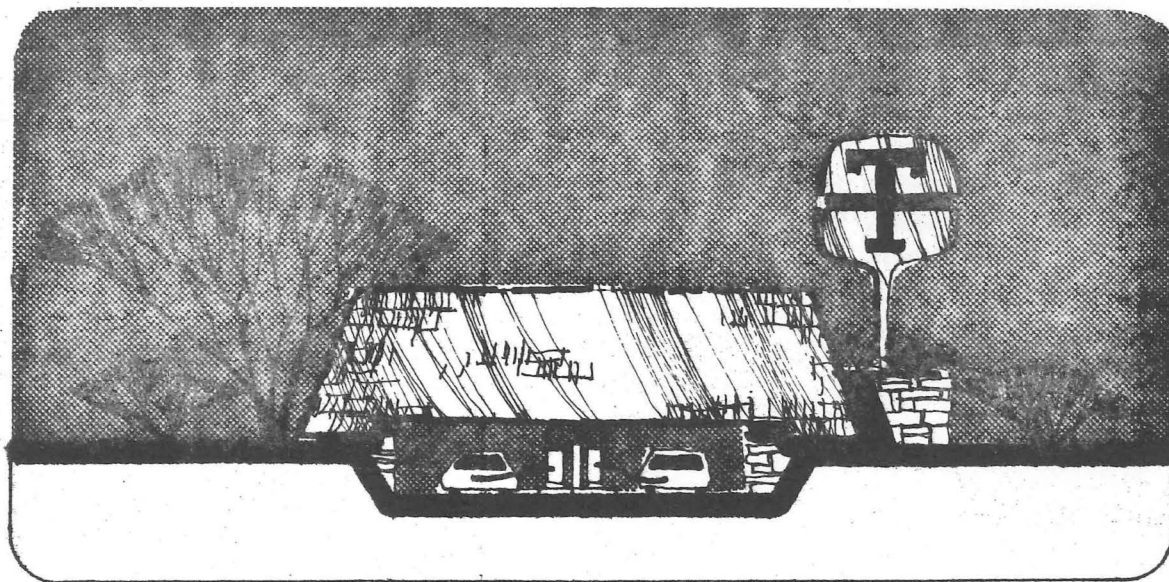
<sup>43</sup> Super Market Institute, Inc., 200 East Ontario St., Chicago, Illinois 60611

<sup>44</sup> "Barometer of Small Business," Accounting Corporation of America, 1929 First Avenue, San Diego, California 92101.

One source reports that a typical service station will produce a volume of 350,000 gallons per year on the average, with a minimum of 180,000 gallons for a small facility.<sup>45</sup> The cost of a station may range from a low of \$50,000 with \$10,000 in land, up to \$90,000 with \$50,000 in land in a metropolitan area.

If the total sales of both regular and high octane fuel produced an average price of 30 cents per gallon, gross expenditures of \$148,000 will purchase over 490,000 gallons of fuel for the year, with a peak of over 150 gallons in August. This will support either one large service station or two small stations.

The seasonality of business may be less troublesome for a service station than for other businesses. When August sales are nearly four times the normal



monthly average operating capacity might be strained somewhat, but the station could be maintained with more frequent gasoline deliveries.

Assuming that a single, large, well designed service station is added in the early years of the park, its cost may run about \$50,000 -- with a low land cost.

<sup>45</sup>American Appraisal Co. Inc., interview with Mr. Terrance Klitzke, Aug. 1968. 79

It may enjoy total sales of \$150,000 out of the total \$197,600 for both "gas and oil" and "other" -- allowing some business for present competitors. Service stations of this size normally pay about 9.45% of sales in wages (other than the proprietor's) and about .69% for taxes and licenses. Taxes from this service station, under these conditions, would then be about \$1000 and wages would be about \$14,000. Actual taxes at present rates would be \$637.00.

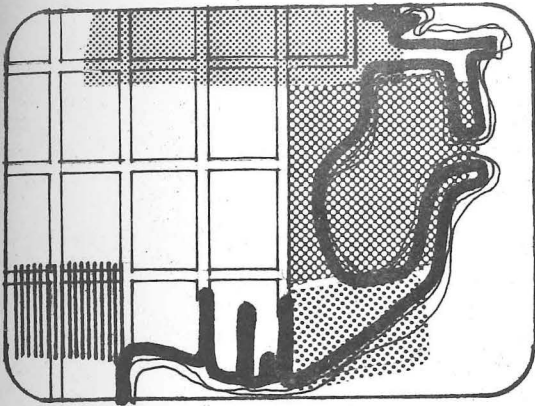
Other auto expense and other transportation expenditures amounting to \$100,000 will occur away from the Bayfield area and presumably en-route or at the travelers' point of origin.

#### Miscellaneous Services

Three hundred thousand dollars will be spent for miscellaneous purposes such as clothing, sporting goods, personal services, gifts, amusements and other uncategorized items. If the businesses that receive these expenditures have an average wage expense of 10% and an average property tax of 1% of total sales, additional wages and property taxes of \$30,000 and \$3000, respectively, will be paid.



## PUBLIC FINANCING OF BLUEPRINT FOR BAYFIELD



The development plan "Blueprint for Bayfield", suggested by the Landscape Architecture Department of the University of Wisconsin consisted of a master report prepared by research staff personnel within the department and a number of design case studies accompanied by models which were prepared by the members of a senior class in Landscape Architecture. The purpose of the design case studies was primarily to suggest the type of development that might meet the goal of the overall project, specifically to control and direct the growth of Bayfield while at the same time preserving the city's scenic quality and visual personality.

The purpose of this section is not to appraise individual proposals or to determine precisely what the entire program will cost. Rather, it is useful to estimate the cost of one possible combination of actions and to put this cost into perspective by comparing the debt service on an equal amount of public debt to the possible real estate tax revenue from new private investment in tourist services.<sup>46</sup>

The estimates in the following section are based on opinions and information developed in interviews with the following individuals.

Mr. Lawrence Wachsmuth, Mayor, city of Bayfield

Mr. Walter Wasmuth, Bayfield County Board of Supervisors, Chairman,  
County Highway Committee, Real Estate Broker

Mr. Justin Walstad, City Assessor, Bayfield, Wisconsin

Mr. Lowell Wolf, Wolf Construction Company, Dousman, Wisconsin

Mr. John Rakocy, Architect, Maynard Meyer & Associates, Milwaukee

Mr. O. W. Smith, Division Engineer, Wisconsin Division, Milwaukee,  
Wisconsin, Chicago & Northwestern Railroad

Mr. H. C. Wendt, Salvage Agent, Chicago & Northwestern Railroad,  
Chicago, Illinois

Mr. W. W. Brown, Brown Nurseries, Hartland, Wisconsin

Recognizing the fact that many parts of the plan will not be realized for many years, the planners made most of their suggestions very general. As a result, any cost estimates based on these suggestions must also be rather general.

The proposal for action calls for three phases. The first phase involves actions which could begin immediately; the third phase includes actions which need not be started for ten to fifteen years; the second phase involves actions which will be taken in the intermediate years.

The first phase involves several actions that will require little extra expenditure. The recommendations include:

- ordinances to control sizes, lighting, and location of signs.
- ordinances to control location and siting of mobile homes.
- cooperation with Department of Transportation officials to relocate Wisconsin State Trunk Highway 13 away from the downtown area.
- working with the Madeline Island ferry operators to study the possibility of relocating the ferry landing to relieve traffic congestion downtown.
- working with the United States Coast Guard and the Wisconsin Department of Natural Resources to study the possibility of relocating them away from what will become the public waterfront -- activities area.
- formation of a local historical society composed of interested local citizens who would protect the city's historic structures from demolition.
- a Rittenhouse Avenue renewal project in which local merchants improve signs, remove clutter and begin planting programs.
- establishment of a Bayfield Foundation to receive and administer contributions from friends of the city who wish to help improve it.
- establishment of a policy to maintain uninterrupted pedestrian access along the waterfront.

Some public expenditures may be required later if the city is effective in persuading the ferry operators and the Coast Guard to relocate.

Many of the actions suggested in the first stage might require the city to spend some money. Whether any of these expenses are eligible for aid from the federal or state governments must be considered later. In some cases quite arbitrary costs have been assigned because the scale of a program could vary quite widely.

Phase One programs to be carried out by the city include:

- city purchase of the south waterfront property now occupied by trailers, for use as public recreation area. About 33 lots, \$65,000.
- city purchase of the privately owned lots which rim the big ravine in order to preserve the wooded condition. About 20 lots at \$200 each, \$4000.
- a comprehensive program to replace diseased and damaged trees along the city streets. Say 25 trees at \$200, about \$5000.
- replatting of second ward as a planned residential development. \$1000.
- park development at the southeast corner of the city including a swimming facility. \$20,000.

(Construction of a swimming pool in this general area may not be technically feasible. According to one source -- the Chairman of the County Highway Committee -- this land is built upon "slabs" (the outside slice of bark and tree) cut by the woodworking companies and deposited on the lake bottom over a great number of years. These slabs rot very slowly and have complicated excavation in other nearby areas.)

- an interim Chamber of Commerce information center at the present headquarter to provide space for local business advertising and tourist information. \$1000.
- an increase in number of boat mooring spaces within the existing harbor basin without addition of new buildings. 25 spaces at \$400, \$10,000.

(The city has received a grant from the federal government for \$270,000 to be matched by \$66,000 of local money for the construction

of 118 boat slips in the south half of the basin. This and all other possible deviations from the master plan have been temporarily disregarded in examining the economic feasibility of the plan.)

Total funds estimated to complete Phase One: \$105,000.

Phase Two, intermediate action, involves several programs that are extensions of programs begun in the first phase. Several involve little or no expense to the city and a few will require the support of the city. Included in Phase Two and requiring little expense are:

- encouraging the development (by private interests) of quality overnight lodging facilities. "These facilities should reflect the scale, materials and rooflines of existing residential development in Bayfield. They definitely should not be duplicates of the facilities built throughout the United States by motel-hotel chains."
- persuading owners of homes near the marina to convert those homes to part-time lodging for visitors. This will provide income to the owners with little investment on their part and at the same time help alleviate the highly seasonal demand for overnight accommodations.
- completing highway 13 re-route, as proposed in Phase One, to reduce traffic noise and congestion along the residential streets of Bayfield.
- beginning, through private investment, a renovation program for the complex of buildings previously occupied by Booth Fisheries. Most of the buildings would be retained for their historic significance but would be converted to new income-producing activities such as restaurants, and display and sale of local art work and crafts.
- attracting new woodworking operations into part of the industrial area. Their products might be sold to tourists in the area, and year-round employment would have a stabilizing effect on the economy.
- initiating architectural or other design control techniques to insure that new structures are built in harmony with Bayfield's visual personality.

Those parts of the second phase, or intermediate action, which will require some public expenditure are:

- development of a "welcome center" outside the city. One of the supplementary design studies envisioned this as a large parking area from which visitors might be transported into town on a small shuttle bus or on a special train that would use an old, scenic railroad track easement along the lake.

In the intermediate stages probably no action would be warranted other than acquiring the land, erecting some tourist orientation material, and providing an area where travelers might stop and enjoy the view.

Estimated cost to acquire 10 acres, \$10,000. (The value of outlying land is rising quickly and future prices are extremely hard to predict. Land selling at less than \$500 per acre in the last four years has recently brought \$1000 and even up to \$2000 for choice parcels.)

Estimated cost of minimal paving, information boards or signs, and a few picnic tables, \$1000.

- development of scenic overlooks with small areas at the intersection of Payne Avenue and Sixth Street, and at the site of the old fountain across the street from Holy Family Convent.

Estimated cost to acquire and develop both sites, \$5000.

- continuation of the improvement program begun during Phase One for Rittenhouse Avenue. This would involve continued efforts to motivate the private owners to properly maintain their properties. The main avenue might be closed to vehicular traffic, and cars would be parked in spaces provided in the interior of the blocks between First Street and Broad Street.

Estimated cost to acquire 19,200 square feet of land (4 lots, 40' x 120' at \$2000 per lot each), \$8000.

Estimated cost to prepare that land for parking, \$5000.

Total estimated cost to city of Phase Two: \$29,000.



Phase Three involves long range action and would include the continuation of activities started during the first two phases. The supplementary design studies which accompanied the master report suggested several major projects that may be considered in ten or fifteen years. Specific actions recommended were:

- a route 13 by-pass of the city to keep congestion and noise out of the city. Further development of the "Welcome Center" outside the city will serve travelers wishing to go into the city.
- encourage development of additional overnight facilities as they are needed.
- a continuing program to insure that remodeling, renovation and new construction blends and complements the original character of building.

The specific recommendations of Phase Three above involve little or no public expense. Alert action on the part of private citizens and conscientious performance by elected officials will be the cornerstone of this part of the program.

Certain of the individual design case studies which accompanied the master report offer interesting suggestions on particular projects that might be undertaken to accommodate the expected growth of tourism and yet preserve the Bayfield character. They are presented as case studies of possible schemes for development -- as alternatives to unplanned and chaotic development. Some of these projects will be undertaken by private capital and some will require public financing. None would probably become feasible before the third phase of development.

There are six areas of development that would most likely appeal to private developers. The replatting of the second ward in the northwest part of the city was suggested as an item in Phase One. Originally platted in a grid pattern, it was never developed because the topography was too rugged. The designers felt that a cluster plan would fit the site conditions well now and provide room for additional housing that will eventually be needed. Most of this land is publicly owned and could be platted and developed by the city and sold. Or the city and county could sell their interests to a private developer when the area is needed. The later course would produce funds for other projects. Possibly



\$20,000 might be received in a sale, although obviously land values ten or fifteen years hence are extremely unpredictable.

The conversion of the old fishing buildings on the lakefront into shops and a restaurant should be accomplished by private investors, as should the future expansion of the Front Street Lodging area, additional building in the industrial area, the development of a new mobile home park on the north side of the city, and any extensive marina development beyond the provision of additional rental slips.

Proposals involving public funds include the park development mentioned in Phase One (including a swimming pool). The design study of the community park area went beyond the swimming pool and suggested that the city acquire the building now occupied by the Conservation Department for use as a bathhouse, warming house for skaters and as a year-round community center. This building is currently owned by the city and will be available for use at the end of a lease. Remodeling of this building might cost about \$20,000.

Efforts to improve Bayfield's business district centered on a promotional campaign in Phase One to get the local businessmen to take better care of their properties -- to keep them clean and possibly to use colorful plantings. In Phase Two it was suggested that some land be purchased for off-street parking. In the long-range design studies, further design proposals are outlined. Fences and trees might be used to cover spaces that open between buildings as buildings are removed for parking lots. For the three blocks of Rittenhouse Avenue in concern this might cost \$3000 over a period of time if, say, five spaces were to open.

Planting tree areas with planted groundcovers in the parking lanes of Rittenhouse Avenue, in six areas in each block as suggested, could cost \$5000. If the Avenue were to be closed to vehicular traffic during the summer months the design study suggests several things to keep it alive. In addition to the plantings, street furniture, benches, bicycle racks made out of barrels, wooden trash barrels, flower containers, and occasional repaving of brick and boards would add personality to the street and might cost about \$2000.

A vest-pocket park in the middle of town would provide a resting place and meeting place for shoppers and strollers. The lot next to the laundromat has been suggested for this purpose. It could be planted with trees and shrubs, with cobblestone walks, benches, and a small decorative pool. Display panels . . . "could provide space to tell the story of Bayfield's past or give information about the business places." The cost to acquire and develop this lot might run about \$6000.

The city could provide original and interesting signs to direct travelers to the various attractions at a low cost. Some type of sign would be erected for this purpose anyway, so no extra cost need be considered.

The design studies suggested expanding the marina and yacht facilities. This is a project primarily for private capital. The city might consider, as the design study suggests, adding more rental slips for small boat users who are not likely to use the yacht club facilities.

The retired Bayfield County Courthouse is ". . . still structurally sound and a prime example of late nineteenth-century civic architecture." It is also a "link with the colorful past." Purchased and rehabilitated, this building could serve as, "an art school and gallery, or drama workshop and theater, some combination of these, with a portion reserved for city office and meeting space."

The design study suggests that the building could be remodeled inside, a parking lot could be provided outside on the north, and an amphitheater developed for the presentation of plays and concerts. The project would be completed by a system of walks and a small entrance plaza and extensive landscaping. Its cost might run around \$75,000/

The entry and awareness center outside the city is one of the most exciting of the design studies. Yet at the same time it might be the least feasible. The plan calls for running a small commuter train on an unused length of track between the old station near downtown and a large parking lot on the outskirts of Bayfield, about one mile away. This will alleviate traffic and parking problems in the city, and offer an unusual and thorough introduction of Bayfield to the visitor.

The purchase of the land was included in the recommendations in an earlier phase. In the third phase this land would be landscaped, paved and improved with several buildings. One building would be an old barn, moved to the site for the purpose of showing films of interest to new arrivals and displaying posters and advertisements. Another building would be a shed-type structure of historic interest. One or two small buildings would serve as a place to check luggage, check on hotel or trip reservations, and gather information about area facilities. The purchase of a number of railroad cars would be required along with the development of a depot downtown.

Costs of the entry-awareness center might be as follows:

Land (acquired earlier) . . . . .	
Landscaping . . . . .	\$ 20,000
Paving . . . . .	10,000
Old barn and shed . . . . .	2,000
Equipment and furnishings . . . . .	2,000
One building for terminal . . . . .	20,000
Fifteen cars (used) . . . . .	500,000
Locomotive (used light weight diesel). . . . .	25,000
Track . . . . .	15,000
Platforms . . . . .	3,000
Downtown station . . . . .	10,000
TOTAL . . . . .	\$607,000

The total cost for the third, or long range phase would appear to be about \$718,000. Table 35 summarizes the cost of each phase.

Table 35. Summary of Costs

PHASE ONE

Purchase of trailer area	\$ 65,000	
Purchase of ravine lots	4,000	
Tree replacement	5,000	
Replat of second ward	1,000	
Park development	20,000	
Information center	1,000	
Addition of boat slips	10,000	
		\$105,000

PHASE TWO

Acquisition of welcome center land	\$ 10,000	
Paving and improvements	1,000	
Two scenic overlooks	5,000	
Off street parking,		
land purchase	8,000	
paving	5,000	
		\$ 29,000

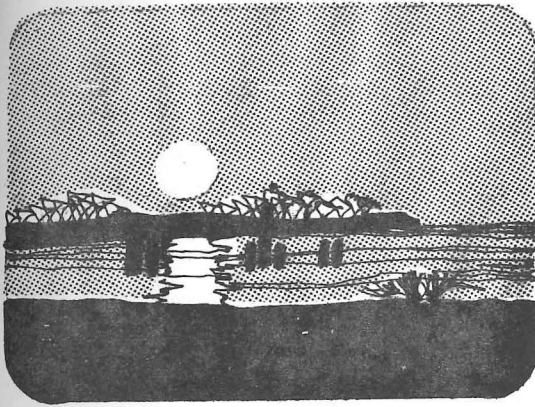
PHASE THREE

Remodeling of building for community center	\$ 20,000	
Trees and fences to cover empty lots	3,000	
Planted tree areas	5,000	
Street furniture	2,000	
Vest pocket park	6,000	
Courthouse rehabilitation	75,000	
Entry and awareness center with train	607,000	
		\$718,000

TOTAL -- ALL PHASES

\$853,000

## CONCLUSIONS



The city of Bayfield will have several sources for the funds it will need to finance its three-phase program of improvement. Most of these sources, however, are very unpredictable.

The Catalog of Federal Assistance Programs,<sup>46</sup> "a description of the federal government's domestic programs to assist the American people in furthering their social and economic progress," outlines over 450 different programs, many of which provide assistance in the areas of physical, natural and economic environment. The form of these programs, their eligibility requirements, and the availability of funds cannot be predicted for future years, but this will be one potential source of money.

The city will likely receive funds from the state government too. But as the formula for sharing taxes between state and local governments is under discussion and subject to change, the amount from this source cannot be predicted.

More predictable at this time than funds from federal or state governments and private gifts, will be the locally collected property taxes. The estimated taxes produced by the basic tourist services, in 1972, as developed earlier, will be:

90-unit resort hotel	\$27,625
Restaurant	nil
Food store	1,720
Service station	<u>637</u>
Total	\$29,982
Rounded	\$30,000

<sup>46</sup> Information Center, Office of Economic Opportunity, June 1, 1967, Washington, D. C.



In addition to this, additional businesses dealing in soft goods, gifts, amusements, personal services and other miscellaneous items will be about \$3000.

If the cost of Phase One (\$105,000) were to be financed by issuing municipal bonds in a healthy, normal bond market, and presuming an interest rate of 6.5% with a repayment term of 15 years, the annual amortization would be \$11,025.

The difference between the total property tax collections from only the basic services, and the amortization requirement amounts to about \$19,000 per year, or over 60% of the tax collections. This would be available to provide city services to the new taxpayers. If bonds were not issued, the city could undertake the projects on a pay-as-you-go basis.

It appears then that Phase One would be feasible on the basis of property tax collections alone. With the possibility of additional funds from federal and state governments, ancillary business' property taxes, gifts, proceeds from sale of city held land, and higher tax collections from appreciated property values, the feasibility seems assured.

Phase Two of the development program will cost an estimated \$29,000 and would probably be begun 5 to 10 years after the opening of the Lakeshore and the beginning of the first phase.

At that time tax collections will have risen and new sources of revenue will have developed. For example, it was estimated that additional restaurant facilities will be warranted by that time and the indicated revenue from property taxes will be about \$2340. For comparison, the amortization costs of Phase Two, at 6.5% for 15 years would be just over \$3000 annually. Phase Two will be feasible with some additional revenue or later timing when revenues have grown.

Phase Three, involving action to be taken 10 to 15 or more years hence, will be quite feasible with one change. The rail service between the awareness center and the middle of the city might be eliminated. Whether visitors will be willing to use the periphery parking and travel on public transportation is highly questionable. This change would eliminate over a half million dollars in cost. In its place, something like a horse-drawn street car would be more in keeping with the desired objective and would serve the purpose more economically.

Phase Three would then assume proportions similar to Phase One, and would certainly be feasible with the revenues of that time.

Substantial economic benefits will accrue to both the community and the state. Tourist spending will generate the following initial payrolls:

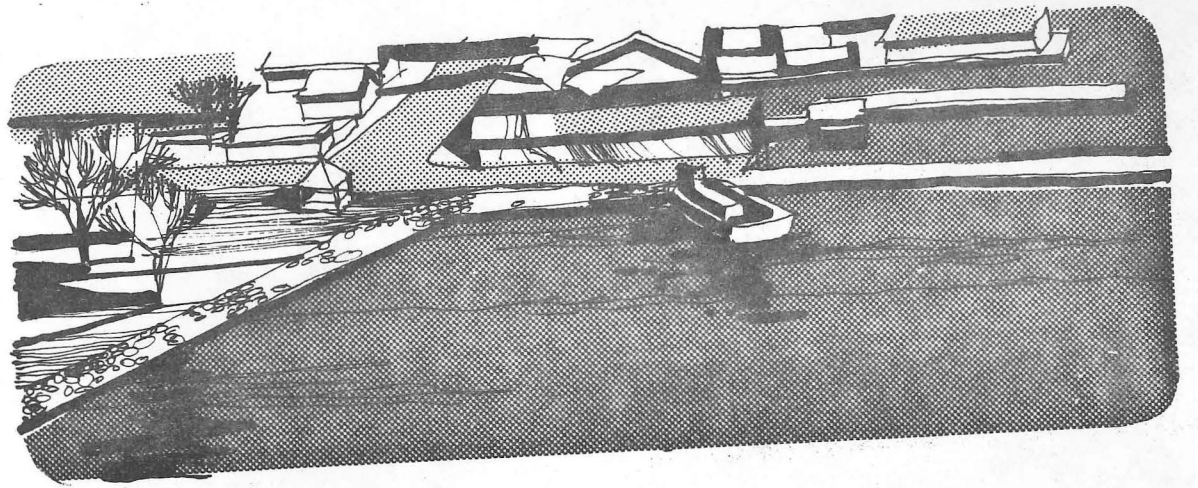
Motel	\$177,500
Grocery	11,400
Service station	14,000
Miscellaneous	<u>30,000</u>
Total	\$232,900

Tourist spending is spent and respent in the community, eventually generating a total income which is some multiple of the beginning amount. This could amount to as much as \$2,700,000 based on 1972 total tourist spending (adjusted for price increases) of \$1,546,000 and a multiplier of 1.75.<sup>47</sup> This spending could run less because seasonally employed college students save the earnings instead of spending. Most of the additional employment will be seasonal, adding to the present summer peak needs. Efforts must continue to stretch the season and provide more year-round employment.

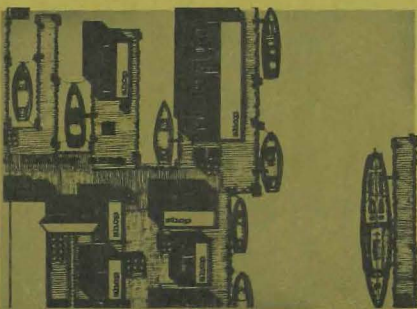
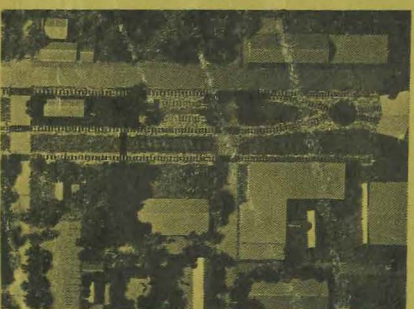
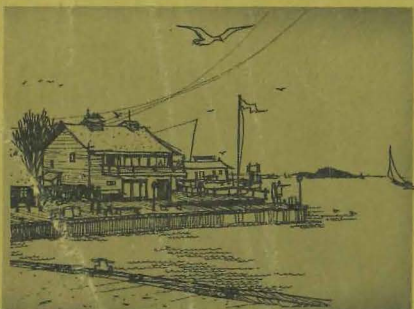
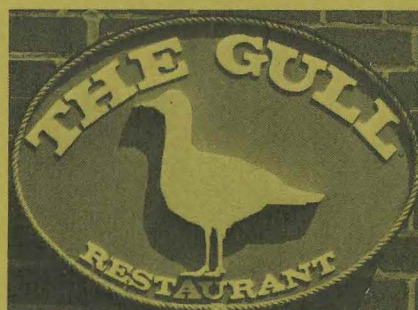
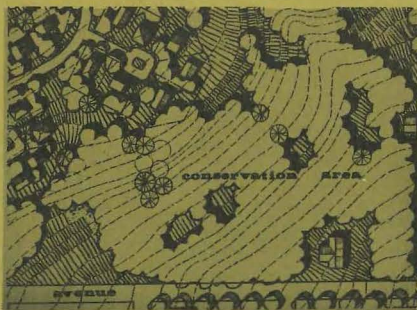
From the point of view of the state government, recreation is doubly important, and the necessity of direct state subsidy may someday have to be considered. Many residents rely on the recreation industry for income and many residents require the tourist facilities for their vacation needs. If tourist facilities could not profitably be operated by the private sector, it may be in the best interests of the touring public for the state to assist the operators financially. Entire depressed areas would benefit through the additional spending and the state could get its "investment" back while vacation needs are met.

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<sup>47</sup> Professor Fine used a multiplier of 1.75 in testimony before the Subcommittee on Parks and Recreation of the Committee on Interior and Insular Affairs of the United States Senate holding hearings on bill S. 778 in May and June of 1967.







**THE RELATIONSHIP BETWEEN NEW PRIVATE INVESTMENT IN BASIC TOURIST FACILITIES AND BAYFIELD TAX REVENUE FOR PUBLIC DEVELOPMENT**