N.C. SCORP

STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

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STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

N.C. SCORP

NORTH CAROLINA DEPARTMENT OF NATURAL & ECONOMIC RESOURCES

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North Carolina. Dept of Natural & Economic Resources

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Evidence is mounting daily that perhaps the most important factor determining the course of American culture in the impending decades will be how our society deals with its burgeoning leisure time. Also implicated in this concern is how this, along with other factors, will ultimately affect the environment which supports our very existence.

Man has constantly sought more time free from the obligations of maintaining subsistence, and in recent decades the heightened accomplishment of this desire has been experienced in the United States. In order to accommodate this trend, governments at all levels have become more interested in, and involved with, providing recreation services--recreation being defined as activities that are diversionary in character and that aid in promoting self-satisfaction or fulfillment during leisure time.

North Carolina State government has a long and proud history of being concerned with the provision of recreation services for its citizens. Early evidence of this is found in the creation of the State Geological and Economic Survey in 1891--predecessor to the Department of Conservation and Development. Through the Division of Forestry of the Survey, the North Carolina State Park System was established around 1915-1916 with the acquisition of Mount Mitchell State Park. Today the State Park System consists of seventeen State Parks and two Natural Areas, and is on the eve of the greatest capital expansion program since its inception.

Stemming from a recognition, during World War II, that a lack of recreation opportunities in the State was contrary to the best interests of the citizens of North Carolina, the General Assembly created the North Carolina Recreation Commission in 1945--the first of its kind in the Nation. One of the primary duties of the Commission was to study and appraise the recreation needs of the State. Another primary duty of the Commission was to promote the organization of local recreation systems.

The General Assembly underscored its intent to promote the provision of recreation opportunities at the local level by enacting that same year, 1945, the "Recreation Enabling Law". Basically, this law gave certain powers and rights to local governments that enabled them to use public monies for the establishment of recreation services in their communities. Some pride can be taken from the fact that the above legislation has led to the creation of sixty-six municipal recreation departments and twenty county departments.

These are past accomplishments that evidence the broad degree of North Carolina's interest in recreation. However, changing conditions of today's culture allow little comfort from such a cursory retrospective view.

Today, North Carolina faces a future that promises more people with more income, more leisure time, and more mobility. The task of accommodating these future conditions will be placed upon the State's precious and limited resources which are being diverted to other-than-recreation uses with every tick of the clock. Now is not a time for contentment from past laurels. Now is a time for new and stronger commitment on the part of the State to achieving a new dimension where the consummation of efficient resource utilization enables enriched individual living through abundant and rewarding leisure time experiences--improved quantity and quality of recreation opportunities.

In its broadest sense, recreation is a social institution, the basis of which is people, individually and/or collectively, seeking satisfying experiences in a voluntary manner. This institution influences and is influenced by other activities, organizations, structures, and institutions that make up the total complex of the environment for living.

As individuals and groups seek satisfying recreation experiences, the degree of success they achieve will be determined by many constraints, including: natural and man-made resources available; social and institutional structures; use patterns at the time of the visit; economic constraints--both of the individual and of society collectively; personal physical constraints--physical, mental, emotional disabilities; accessibility of resources for recreation; constraints imposed by the nature of the experience (and/or satisfactions) sought; personal time constraints--availability of free time; climatic, seasonal, geographic constraints; behavior patterns of all participants at time of visit; and individual participant's frame of mind at time of visit.

All suppliers (public, private, commercial) of recreation opportunities are concerned about the above constraints in varying degrees--depending upon the nature and scope of their authority and responsibility. The State of North Carolina, as a promoter and supplier of recreation opportunities, is guided by the following principles regarding recreation:

1. That recreation takes its place with education, health, religion, welfare, and work as one of the six essential factors affording people total living opportunity.

2. It is imperative in our democracy, and in the democratic concept of recreation, that the right of free choice be maintained.

3. That satisfying recreation experiences are human values which are a legitimate concern of State government.

4. That recreation experiences are enhanced by a high quality of environment in which they may be enjoyed, and the quality of environment for recreation is a legitimate concern of State government.

5. Social and institutional structures of and within the State should provide for the greatest possible individual fulfillment and freedom of choice in recreation.

6. Recreation use patterns should be controlled, if need be, by suitable means to assure that maximum use does not unduly deteriorate a resource for future generations.

7. Economic constraints--individual and societal--should be eliminated or reduced to the extent that all citizens may share as equally as possible in the personal benefits of recreation experiences of quality, quantity and variety.

8. Planning, acquisition, development, management and operation of recreation areas, facilities and programs should be such that personal physical constraints do not unduly restrain any citizens from equal opportunity for satisfying recreation experiences.

9. Varieties of recreation area types should be acquired, developed and/or maintained on a geographic basis in such a way as to provide all urban and metropolitan population centers with reasonably similar degrees of accessibility.

10. Access to individual types of recreation areas (and individual activity areas within each) should be such that relatively easy access may be had by all potential users. The exceptions to this would be cases where controlled access and other use limitations should be placed in effect in order to preserve the natural and/or unique qualities of the site which may be the primary purpose for its operation.

This plan, an appendage of North Carolina's continuing recreation planning program, can serve as the genesis of a new commitment toward achieving this new dimension. Likewise, this plan can falter and die--perhaps along with the future recreation hopes of the State's citizenry. The State's leaders and decision-makers must determine which course the State will follow.

Scope and Objectives 11-0.00

Planning is a process that continues through time, and any plan document or report must be interpreted as a static extraction from this process. A Statewide Comprehensive Outdoor Recreation Plan is an interpretation of the future outdoor recreation needs of the State, and its function is to recommend actions for the achievement of long-range goals and objectives. It establishes the broad framework within which specific programs and decisions can be made, but its purpose is not to make these decisions. It is the continuous feedback from new information and day-to-day planning that creates the revision process upon which continuing planning depends. Only if planning is a flexible, on-going process can the needs of the future be fully understood and properly planned for. This plan sets the direction and provides the framework.

The purpose of the SCORP planning program is to develop and maintain a feasible and effective action program to assure an adequate environment for satisfying outdoor recreation experiences of sufficient quantity and quality for present and future citizens and out-of-state visitors.

The scope and objectives of the SCORP planning program are to promote or effect the following conditions or tasks:

1. Further refinement and continuous maintenance of a broad conceptual framework within which the State will perform an effective outdoor recreation planning program.

2. Further development and refinement of overall objectives of the State regarding recreation in general, and specifically recreation planning.

3. Strengthening and refining the organizational structure, staff capability and cooperative arrangements for recreation planning on a Statewide basis.

4. Refinement of a recreation information system for effective collection, analysis, storage, retrieval of necessary data and information concerning recreation planning.

5. Improvement and continuous maintenance of effective relationships with the public sector (Federal, State, local), private sector, and commercial sector in order to assure maximum coordination and, where necessary, effective controls for the development and maintenance of effective and efficient use of the State's recreation resources (existing and potential) for present and future generations.

6. The development and maintenance of a comprehensive outdoor recreation plan that will meet the requirements of the Bureau of Outdoor Recreation in maintaining eligibility for the State to participate in the Land and Water Conservation Fund.

7. Development and maintenance of a recreation plan for the State which is coordinated with and a part of any statewide comprehensive development plan and coordinated with planning at other functional and jurisdictional levels.

8. Development and maintenance of a planning program which will include all elements necessary to serve as a guide to all recreation programs and activities within the State, including the acquisition and development of land and water areas.

9. Development and maintenance of priorities within and among recreation programs for the efficient and effective accomplishment of recreation planning goals.

10. The dissemination of information to Federal, State, local and private agencies and to the general citizenry concerning the recreation needs of the State and appropriate procedures, standards, criteria, and other means of alleviating these.

The purpose of the Statewide Comprehensive Outdoor Recreation document itself, as opposed to the purpose of the on-going planning program, is to provide a management tool for use by the Governor and General Assembly in examining and selecting investment alternatives.

The scope of this document encompasses (1) providing basic data regarding the existing supply of recreation opportunities and the existing demand for these opportunities, (2) analyzing these data to determine future needs, (3) analyzing present roles and capabilities of the various providers of recreation opportunities, especially State government, to meet these needs, and (4) making recommendations that define a course of action that will most effectively and efficiently meet future outdoor recreation needs.

Maintaining North Carolina's SCORP 12-0.00

The general procedure for maintaining the SCORP is outlined in Figure I. 1. This diagram depicts a system of conditions and processes that function to help determine the quality of life for North Carolina citizens. The diagram emphasizes how the SCORP provides input to the system for the ultimate purpose of improving the general quality of life for the State's residents and visitors.

The bold blocks in the lower half of the diagram represent the manner in which the SCORP will be maintained. The sequence implied is as follows: Current State agency programs (1) define a framework within which the SCORP function must operate. Ideally, these agency programs help to define the "recreation planning objectives" (2) which guide the establishment of more refined "SCORP program goals" (3). The evaluation of these goals in terms of priority planning needs helps define the "specific SCORP work elements" (4) required. "Planning data" (5) regarding the work elements is then prepared and analyzed so that, "SCORP recommendations" (6) can be conveyed (in the SCORP document) to the executive branch of State government (7), which in turn, promotes needed changes (8) in "state agency operations" that will, facilitate implementation of the SCORP recommendations (9). This flow represents the major process for SCORP maintenance. However, as indicated by the brackets, many of the "main line SCORP blocks" may, at any time receive inputs from Federal program constraints, State agency programs, or legislative functions that can either subvert or enhance the attainment of the State's recreation planning objectives. Likewise, the recreation planning objectives may also be refined and provide new impact to any or all of the remaining "main line SCORP process" blocks.

The ultimate aim of this system, then is to bring about desirable changes in recreation through implementation of SCORP recommendations so that the quality of life of North Carolinians is continually improved. The dynamics of the system can either support or thwart the accomplishment of this aim.

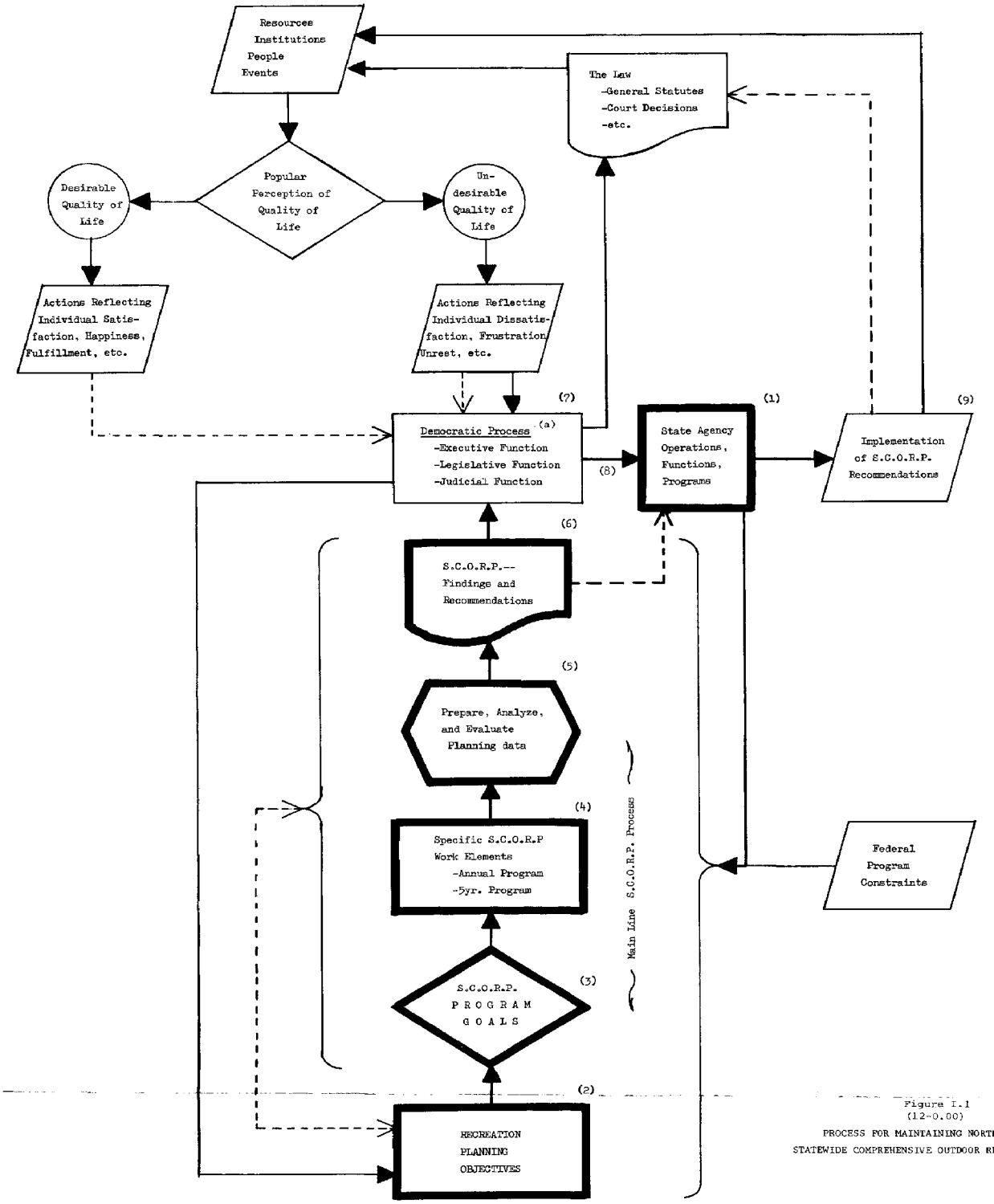
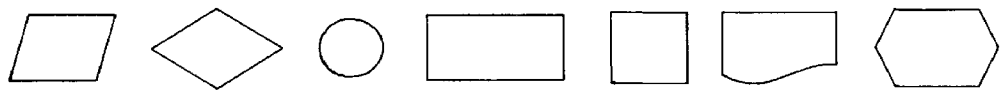


Figure I.1
(12-0.00)
PROCESS FOR MAINTAINING NORTH CAROLINA
STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

L E G E N D :



DIRECT FLOW OR RELATIONSHIP

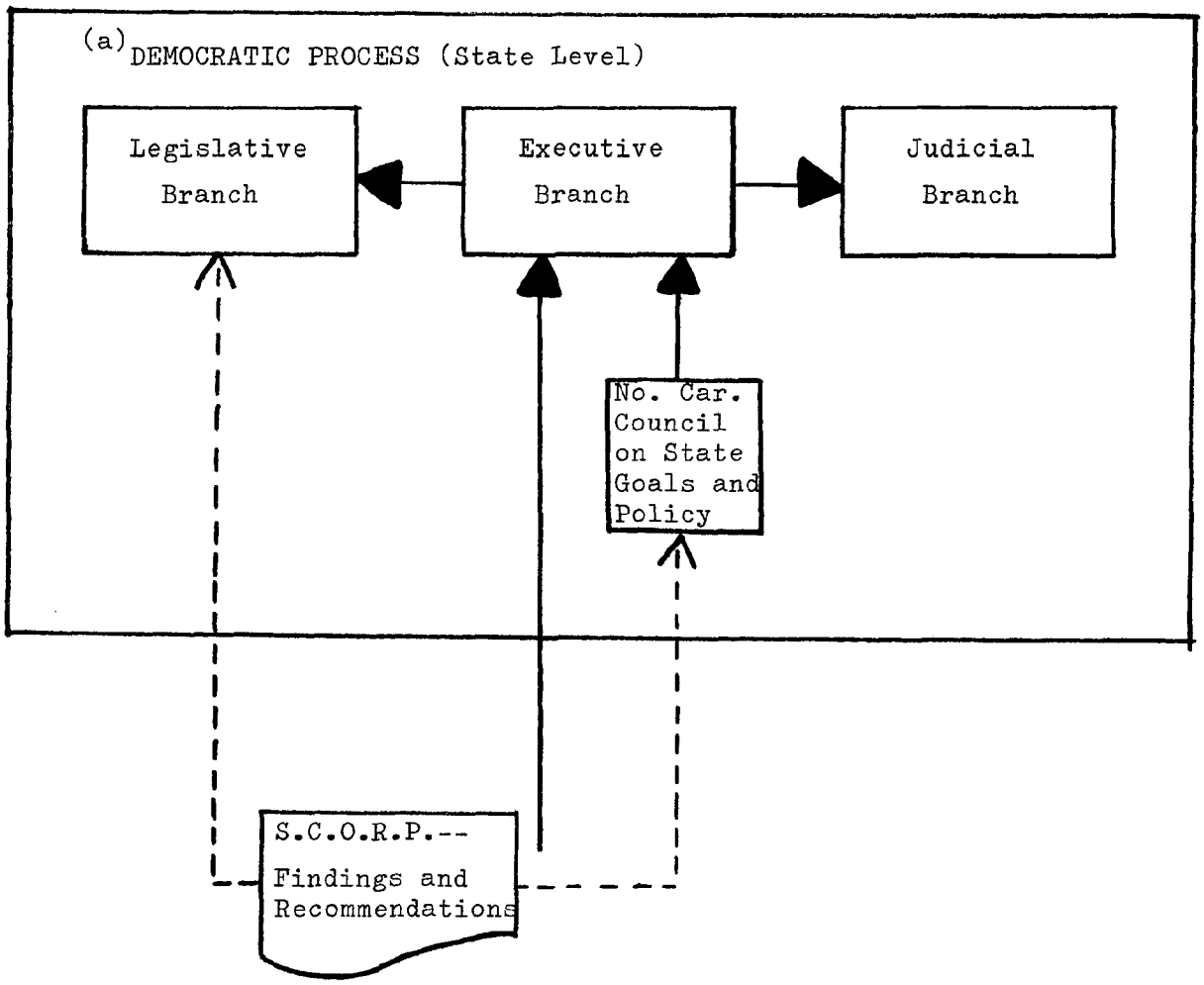
INDIRECT, INFORMAL OR OPTIONAL FLOW

(a) see Figure I.1a for detail

FIGURE I.1a

(12-0.00)

DETAIL OF S.C.O.R.P. INPUT TO
STATE LEVEL DEMOCRATIC PROCESS



Recreation Planning Coordination 13-0.00

In order for an on-going recreation planning program to be effective, it must be coordinated with other planning efforts at the State, regional, local, and Federal levels. Procedures for this coordination are currently established in North Carolina.

Primarily, this coordination is accomplished through the A-95 clearinghouse review procedure; the Land and Water Conservation Fund Review Committee; the general role and function of the Office of Recreation Resources, Department of Natural and Economic Resources; and the general role and function of the Office of State Planning, Department of Administration. It is anticipated that these channels will be maintained in the future and augmented with new efforts to gain citizen participation in the planning process. These efforts will include, but not be limited to public hearings and the dissemination of current information relative to recreation. Other new efforts are described in Chapter VIII of the plan.

Common use of planning resources will also be maintained through the above process for plan coordination.

Chapter II — 20-0.00 thru 21-1.10
Summary of Findings, Policies, and Recommendations

Outdoor Recreation Demand — 21-0.00

Outdoor recreation demand is defined, for purposes of this plan, as participation in outdoor recreation activities (activity demand) or facilities (facility demand). It must be noted that there is also a "latent outdoor recreation demand"--the amount of outdoor recreation demand that is not expressed because areas to accommodate its expression are nonexistent. No attempt has been made in this plan to measure latent demand.

There is agreement on three basic principles relevant to demand for outdoor recreation: (1) the demand for outdoor recreation is increasing, (2) the majority of people will, when given the opportunity and freedom of choice, devote a portion of their time and financial resources to the pursuit of one or more forms of recreation, and (3) the expression of outdoor recreation demand is affected by various socioeconomic factors.

Household Survey of Outdoor Recreation Demand — 21-1.00

To obtain an estimate of demand, a household survey was conducted using a questionnaire to gain data on five main areas of concern: geographic information regarding both origin and expression of demand, socioeconomic traits of participants, amount of participation by activity, amount of participation by type of trip, and participant attitudes regarding outdoor recreation. Interviews were conducted using a stratified random sample of 735 households at eighty sample points across the State.

Activities — 21-1.10

The survey considered thirty-five different recreation activities and concentrated on participation by household adults--eighteen years of age or older.

The ten most popular recreation activities can be determined from several view points. In terms of annual total number of days of participation per household, the ranking is:

1. Pleasure driving
2. Sightseeing
3. Picnicking
4. Playing outdoor games
5. Viewing outdoor games
6. Swimming--other than pool
7. Nature walking
8. Swimming--pool
9. Fishing
10. Bird watching

These ten activities provide about 75% of the annual total activity days of recreation participation by the State's residents.

A slightly different ranking results when the activities are viewed with respect to the number of households with some degree of participation. Such a ranking is:

1. Pleasure driving
2. Sightseeing
3. Picnicking
4. Fishing
5. Viewing outdoor games
6. Swimming--other than pool
7. Swimming--pool
8. Nature walks
9. Visiting historic sites
10. Hunting

Each of the other activities has participation by less than 25% of the State's households.

Some differences between participation by males and females were found. The males had greater participation rates for such activities as playing outdoor games, fishing, golf, hunting, and target shooting. Females had greater participation rates for sightseeing, viewing cultural exhibits, and bird watching. About equal rates of participation by males and females were found for other activities including mountain climbing, rock hunting, ice skating, and snow skiing.

Chapter II — 21-1.20 thru 21-1.40
Summary of Findings, Policies, and Recommendations

Vacation Trips — 21-1.20

The demand survey revealed that North Carolinians spend about twenty-nine million visitor days annually in the pursuit of recreation activities that occur during vacations. Almost 70% of this demand accrues to recreation areas located outside the borders of North Carolina. A full 60% of North Carolina households take vacation trips, and about 80% of these involve outdoor recreation. It was common for the vacation (1) to be a family affair, with about two-thirds of the reported trips involving the entire family, and (2) to take place during the school vacation period--75% during the months of May through August.

Nonvacation Trips — 21-1.30

Non-vacation trips accounted for 71% of the total number of recreation trips taken by North Carolinians. About 30% of these were out-of-state trips. Further analysis indicated that 29% of North Carolina households take trips of this type in the spring, 50% in the summer, 39% in the fall, and 26% in the winter. The total annual non-vacation trip frequency was slightly less than five trips for those households participating.

Income had a significant influence on non-vacation trips. As income increased; (1) the trips were for greater distances, (2) more trips were taken, (3) the trips were more likely to involve out-of-state travel, and (4) there was a greater likelihood that the trip was to a profit-seeking recreation area. For all income groups the trip usually included the entire family, but the lower income groups more often included relatives and friends.

Factors Affecting Demand — 21-1.40

Opportunity to engage in recreation can be viewed in regard to several types of individual characteristics--constraints. Since recreation is an individual matter, its occurrence may depend upon factors of age, sex, education, income and available leisure time

as they apply to the individual. Given levels of recreation demand are the result of the presence or absence of certain barriers or constraints. The manner in which these factors operate is of utmost interest, and is the subject of considerable research. These factors, referred to as socioeconomic characteristics, can be measured. The major characteristics dealt with in detail through the household survey of demand were those of income and race.

Income — 21-1.41

The relationship between income and outdoor recreation participation was not surprising--a positive correlation was found. As income increased there was a corresponding increase in participation (demand). There were some interesting variations among the four income groups studied ($0,000 to $3,999; $4,000 to $7,499; $7,500 to $9,999; $10,000 and over). There was little difference in demand by the $4,000, $7,500 and over $10,000 income groups for such activities as driving for pleasure, sightseeing, playing outdoor games, nature walks, fishing or bird watching. The over $10,000 group had greater participation in picnicking and swimming. The under $4,000 group had lesser demand for all activities.

For most activities, however, there was considerable variation in the participation rates among the four income categories. Those activities that have the greatest cost or investment requirements showed the clearest correlation; increased participation with added income. Power boating is an example; the per cent of households participating by income group were, from lowest to highest income, 5.2%, 13.4%, 14.6% and 23.3%. Similar results were obtained in the survey for such activities as swimming, picnicking, golf, tennis and snow skiing.

There are important implications in this relationship. New recreation areas should be planned with ample consideration given to the income characteristics of the "market area"--provisions should be made to limit financial barriers where needed. This factor requires careful study in most urban areas in the State due to concentrations of low income populations.

Race 21-1.42

The household survey revealed a noticeable disparity between white and nonwhite recreation participation. Whites took more nonvacation trips than did nonwhites, they were more often overnight and the total number of days were greater. Nonwhites more commonly visited North Carolina recreation areas and more frequently included friends on the trip.

Availability of Resources 21-1.43

The survey included a consideration of attitudes relative to the adequacy of recreation areas and facilities. The analysis considered age groups, income, and race. The results indicated that the general sample felt that the young (under 19 years) and the old (over 65 years) were the most neglected in present recreation opportunities.

The results indicate overwhelmingly that the major factor that would increase participation would be more recreation areas nearer homes with easier access.

User Fees and Charges 21-1.44

It was noted earlier that vacation trips very frequently involved a profit seeking recreation area. The survey of attitudes, however, definitely revealed a desire for the nonprofit type of recreation areas--from 60% to 90% of the households, depending on income, preferred nonprofit recreation areas. There was also a definite preference for using both tax funds and user fees for financing needed recreation expansion.

Chapter II — 21-2.00 thru 21-3.00
Summary of Findings, Policies, and Recommendations

Impact of Nonresidents 21-2.00

A study of out-of-state visitors was conducted as part of this plan. Its purpose was to gauge both the volume and the significant characteristics of the visitors to North Carolina recreation areas.

Some National and better known State recreation areas had more than 50% of their attendance from out-of-state persons. Municipal recreation areas are rarely visited by out-of-state patrons.

Most of the visitors in the sample entered the State from the south or southeast--63%.

There was no firm pattern as to length of stay. The most common was two to three days with many staying four to six days. It is interesting that about 11% remained in the State for fourteen days or more. About 70% returned directly home when they left the State, and few remained at any one given recreation area in the State more than one day.

Participation in activities, ranked from highest to lowest, was; sightseeing, viewing historic sites, swimming, camping, and picnicking.

Generally, it was determined that North Carolina is a net exporter of recreation demand--more outgoing residents than incoming visitors.

Technological Advances 21-3.00

There are four major areas that have implications for future recreation demand. Their impact must be considered for both positive and negative effects. These are; transportation, recreation support equipment and facilities, health and safety advances, and the effect of new techniques in environmental resource management.

Changing Patterns of Demand — 21-4.00

A current use study was completed using visitation data recorded through the year 1969. Considered in the study were National and State recreation areas. The analysis lacks sufficient amounts of data for many areas to provide firm trend indications. For most of the sites there was increased use with Cape Hatteras National Seashore being the exception with very little change during the period 1964-69. The Blue Ridge Parkway, however, averaged a 9.8% annual increase in per capita attendance.

Some of the conclusions of the study are: (1) total annual attendance increases varied from 1.8% to 65.2% between 1965 and 1969, (2) the trends in specific recreation activities varied widely, (3) visitor use does follow definite seasonal patterns--highest in July, lowest in January, (4) attendance increases when areas are developed further, and (5) fishing and boating have increased more rapidly than hunting.

Anticipated Demand — 21-5.00

In projecting future demand, consideration was given to three basic factors that provide the important influences; population, income, and leisure time. In order to facilitate projection, the following assumptions were made: population will increase at expected rates; increases in income and leisure time will occur at expected rates; the degree and direction of present relationships between income and demand will continue; and generally, recreation demand will increase directly proportional to increases in population, income and leisure time.

The rates of increase for the different factors used in the plan were population--7.39% to 1976, 20.7% to 1986, and 87.4% to 2020; income--.25% annually; leisure time--.50% annually.

The following projections were derived for adult State residents:

Demand Measure (millions)	Year		
	1976	1986	2020
Adult activity days	148.8	179.8	349.7
Adult visitor days at recreation areas	65.9	79.6	154.9

Chapter II — Summary of Findings, Policies, and Recommendations — 22-0.00 thru 22-1.10

Outdoor Recreation Supply — 22-0.00

Supply Inventory — 22-1.00

A statewide inventory of significant outdoor recreation areas was conducted to provide supply data for this plan. There were two basic goals of the inventory; update and refine the 1967 inventory, and facilitate the calculation of capacity.

In carrying out this phase of the plan, the county was the basic reporting unit and all significant outdoor recreation areas in both the public and private sectors were included. The process followed an aim to list specific types of recreation areas rather than the enumeration of individual facilities and fixtures.

Classification of Areas — 22-1.10

Any attempt to inventory recreation areas requires a classification system. The system developed and used in this plan involved a combination of the Bureau of Outdoor Recreation classification system and a complementary State subclass system. Briefly, the system is as follows:

BOR Class	Subclass	Designation
I		High Density Recreation Areas
	01	Mini-Park
	02	Playground
	03	Neighborhood Park
	04	Combined Neighborhood Park and Playground
	05	Playfield
	06	Community Park
	07	Citywide Park
	08	District Park
II		General Outdoor Recreation Areas
	09	Countywide Park
	10	Specialized Outdoor Recreation Area -- Low Intensity Use
	11	Specialized Outdoor Recreation Area-- Medium Intensity Use
	12	Specialized Outdoor Recreation Area-- High Intensity Use
III		Natural Environment Areas
	13	Natural Specialized Outdoor Recreation Area --Low Intensity Use
	14	Regional State Park
	15	Destination Park/Recreation Area
IV		Outstanding Natural Areas
	16	Unique Natural Area
V		Primitive Areas
	17	Wilderness Area
VI		Historic and Cultural Sites
	18	Historic/Cultural Area

Chapter II — 22-1.20 thru 22-2.00
Summary of Findings, Policies, and Recommendations

Data Collection — 22-1.20

The basic criteria for including an area in the inventory were; whether or not the site was used primarily for recreation, whether or not the site was primarily developed for outdoor recreation, and how significant the primary user group was for statewide comprehensive planning purposes. A large number and variety of recreation areas met these criteria.

Types of resources not included in this inventory included large lakes and reservoirs (covered in a special study of the SCORP), motels and highway rest stop areas.

Inventory Results — 22-1.30

The data analyses completed for this plan produced a variety of computerized reports and a significant mass of data. Table V.2 describes the several reports yielded through the inventory process. Specific supply information gained in the inventory is contained in Chapter V of this plan and includes; a State map graphically depicting outdoor recreation supply by planning region, tables giving site counts and acreages by BOR class and region, a narrative summary of each geographic region, and a narrative summary of each multi-county planning region.

Table II. 1 is a State summary of the inventory data by BOR Class and geographic region. The inventory revealed approximately 2,500 recreation areas in the State comprising some 2,179,000 acres.

Capacity Analysis — 22-2.00

In the overall analysis of supply and demand, it was necessary to have measures of supply capacity that were compatible with measures of demand. The unit was the visitor day, and capacity figures were derived in terms of visitor days.

The method used involved the establishment of prototype parks for each subclass and computing optimum capacity data on a per-acre basis. The capacity standard was then applied to the sites in the inventory to obtain a theoretical optimum annual capacity figure. The basic factors considered included classification of the area, per cent developed, size, type of development, length of primary recreation season, and per cent of total annual attendance occurring during the primary season.

The results of the capacity analysis are reported in Table V.7.

Potential Recreation Lands and Waters 22-3.00

Potential recreation resources are considered to be lands and waters that are presently undeveloped and that are of such a nature that their development for recreation would be desirable.

Regarding this topic, the major thrust of the inventory was to provide data to determine the potential for expansion of present recreation sites. This analysis revealed that only about 2.5% of existing recreation acreage could be developed further.

No general land inventory of potential recreation resources for new acquisition was completed for this SCORP. In broad terms, however, the subject was covered in some of the special studies of this SCORP program.

TABLE II. 1

(22-1.30)

NORTH CAROLINA OUTDOOR RECREATION INVENTORY
BY BOR CLASS AND GEOGRAPHIC REGION

	MOUNTAIN		PIEDMONT		COAST		STATE	
	Sites	Acres	Sites	Acres	Sites	Acres	Sites	Acres
Class I	55	799	600	7,054	280	2,062	935	9,915
Class II	389	91,274	521	76,574	441	60,045	1,351	227,893
Class III	64	1,078,480	52	216,228	84	602,805	200	1,897,513
Class IV	4	8,304	2	210	2	12,200	8	20,714
Class V	1	13,350	1	7,565			2	20,915
Class VI	5	80	13	856	17	1,436	35	2,372
TOTAL	518	1,192,287	1,189	308,487	824	678,548	2,531	2,179,322

Chapter II — 22-3.10 thru 22-3.14
Summary of Findings, Policies, and Recommendations

Special Supply Studies — 22-3.10

This SCORP planning effort developed a series of eight Special Supply Studies considering different aspects of natural resources as they relate to recreation in North Carolina. They are not reproduced as a part of this plan document; however, a limited number of copies are available, upon request, from the Office of Recreation Resources.

The North Carolina Coastal Zone — 22-3.11

This study considered such items as public access, pollution, problems of management and operation, land use zoning, maintenance of natural characteristics and potential for further recreation usage of the North Carolina coast.

Natural and Scenic Rivers — 22-3.12

This study had a goal of preparing standards, criteria and recommendations for a State Natural Rivers System in North Carolina.

Resources for Trails in North Carolina — 22-3.13

This study considered the need and potential of trails including those suitable for horseback riding, cycling, walking, hiking, scenic and historic appreciation. It assessed the resources available, trail potential, management and operation criteria, use restrictions, responsibilities and public access.

Flood Plains--A Potential for Recreation and Open Space — 22-3.14

The major items in which this study was concerned were planning, management and zoning, outdoor recreation use and open space potentials.

Chapter II — Summary of Findings, Policies, and Recommendations — 22-3.15 thru 22-3.18

Lakes and Reservoirs for Recreation in North Carolina — 22-3.15

The major purpose of this study was to compile data available from several sources into a single inventory of lakes and reservoirs in the State. The inventory includes data on ownership, operation, size and location.

Resources for Scenic Roads in North Carolina — 22-3.16

This study considered the State's resources and needs for scenic roads and highways and the potentials for scenic and historic roads.

Recreation on North Carolina Islands — 22-3.17

A major concern of this study was to further analyze and study the islands listed in the report of the National Islands Inventory. Islands of significance were considered in terms of ownership, present use and potential for recreation use.

Historic/Cultural Sites — 22-3.18

This subject was considered in detail in a study conducted by the N. C. Department of Archives and History. It contains a detailed description of historic preservation activities and an inventory of sites.

Chapter II Summary of Findings, Policies, and Recommendations	23-0.00 thru 23-1.00

Standards and Needs 23-0.00

Correlation of Measures of Demand and Supply 23-1.00

Earlier chapters were addressed to determinations of demand and supply. This plan employed procedures and developed data in a manner so that demand and supply could be correlated to develop standards for recreation acquisition and development.

Comparing the two types of data was accomplished by developing a simple ratio resulting from dividing demand by supply capacity (d/s ratio). This ratio indicates resource levels less than desired if the index number is greater than 1.0. An index of less than 1.0 represents the proportion of present supply capacity that is utilized by existing demand. These ratios were used to guide the development of standards.

Demand/Supply (d/s) ratios were computed for each subclass of outdoor recreation site. These data represent the relative sufficiency of existing outdoor recreation areas. These data are summarized for the State in Table II. 2.

The next step in establishing standards for acquisition and development was the calculation of base line standards. A base line standard is the ratio of existing supply to existing population of the area being served--acres per thousand population. A State summary of these data are provided in Table II. 3.

Comparisons of the baseline standards and the d/s ratios guided the establishment of planning standards to identify needs for acquiring and developing recreation areas. The standards thus developed for use in North Carolina are as follows:

Outdoor Recreation	BOR Class	Acres Per 1,000 Population Planning Standard
Neighborhood Emphasis	I	2.5 ac/1,000 pop.
Community Emphasis	I	2.5 ac/1,000 pop.
City Park	I	5.0 ac/1,000 pop.
Total BOR I----------		10.0 ac/1,000 pop.
District Park	II	2.5 ac/1,000 pop.
County Park	II	10.0 ac/1,000 pop.
SORA-Low	II	8.0 ac/1,000 pop.
SORA-Medium	II	20.0 ac/1,000 pop.
SORA-High	II	2.0 ac/1,000 pop.
Total BOR II----------		42.5 ac/1,000 pop.
III SORA-Low	III	150.0 ac/1,000 pop.
State Park	III	15.0 ac/1,000 pop.
Destination Park	III	125.0 ac/1,000 pop.
Total BOR III----------		290.0 ac/1,000 pop.

Present and Future Acquisition and Development Needs 23-2.00

The standards developed were used to compute needs for outdoor recreation resources in the State. These needs represent the additional quantity of recreation resources that should be provided by or before the years for which the needs were computed; 1971, 1976, 1986.

Due to the magnitude of present needs and hazards of projecting beyond 15 years into the future, needs beyond 1986 were not computed. A summary of the needs thus determined for the State is given in Table II. 4.

TABLE II. 2

(23-1.00)

RELATIVE SUFFICIENCY* OF TOTAL OUTDOOR RECREATION AREAS

Subclass	Geographic Region			State
	Mountains	Piedmont	Coast	
Neighborhood Emphasis	0.191	0.381	0.371	0.364
Community Emphasis	0.186	0.247	0.333	0.260
City Park	0.417	0.220	0.151	0.219
District Park	0.096	0.050	0.018	0.030
County Park	0.158	0.141	0.235	0.148
SORA Low	0.180	0.243	0.160	0.200
SORA Medium	0.040	0.052	0.047	0.044
SORA High	0.034	0.042	0.029	0.037
III SORA Low	0.018	0.714	1.099	0.503
State Park	0.999	1.291	8.149	1.689
Destination Park	4.862	15.646	8.229	5.138
Unique/Natural	0.090	6.030	0.012	0.097
Wilderness	-	0.077	-	0.077
Historic/Cultural	1.661	0.546	0.455	0.544

*d/s ratios: where, numbers less than one (1) reflect supply greater than demand and visa versa for numbers greater than one (1).

TABLE II. 3

(23-1.00)

BASE LINE STANDARDS* FOR TOTAL RECREATION AREAS

Subclass	Geographic Region			State
	Mountains	Piedmont	Coast	
Neighborhood Emphasis	0.381	0.760	0.493	0.630
Community Emphasis	0.517	0.977	0.540	0.713
City Park	0.350	0.716	0.283	0.536
District Park	0.050	0.554	0.375	0.435
County Park	8.733	4.588	1.268	4.087
SORA Low	32.255	11.253	21.397	17.026
SORA Medium	100.690	10.080	15.017	23.017
SORA High	0.639	0.575	0.271	0.490
III SORA Low	1322.996	67.204	356.127	299.456
State Park	7.689	7.337	14.747	9.665
Destination Park	493.852	0.663	13.916	66.880
Unique/Natural	14.254	0.073	7.788	4.076
Wilderness	-	2.631	-	1.489
Historic/Coltural	0.125	0.308	0.917	0.473

*Acres of existing supply per one thousand population

TABLE II. 4

(23-2.00)

NET OUTDOOR RECREATION NEEDS IN ACRES

Subclass	1971				1976	1986
	Mountain	Piedmont	Coast	State	State	State
Neighborhood Emphasis	602	2,252	1,430	4,284	4,561	5,119
Community Emphasis	597	1,995	1,405	3,997	4,252	4,759
City Park	1,341	5,608	3,317	10,266	10,949	12,293
District Park	863	3,532	1,926	6,321	6,750	7,601
County Park	4,892	19,610	13,910	38,412	40,789	45,564
SORA Low	0	2,378	205	2,583	2,853	3,289
SORA Medium	0	30,188	20,132	50,320	53,391	59,796
SORA High	833	4,097	2,709	7,689	8,168	9,170
III SORA Low	0	321,517	55,670	377,187	409,938	473,174
State Park	7,514	22,030	16,632	46,176	48,948	55,246
Destination Park	-236,151	357,498	174,026	295,373	376,010	496,757
State Total				842,607	966,612	1,172,767

Cost Estimates 23-3.00

In order to view the identified needs in meaningful terms, an estimate was made of the aggregate dollar cost required to meet the needs. This estimate represents investments of all sectors--public, private and commercial--and includes net needs for the year 1971 only.

The estimates were arrived at by using prototype park criteria and the latest land and development costs from summaries of LWCF project applications. These data were insufficient to enable a breakdown by region or county. The cost estimates are shown in Table II. 5. The "total" cost represents optimum development of the several classes of sites. For contrast, a "minimum" cost estimate is also provided.

TABLE II. 5

(23-3.00)

SUMMARY COST ESTIMATES OF INVESTMENT REQUIRED TO MEET 1971 NEEDS

Class & Subclass	Statewide Needs-Acres	Total Cost Estimate	Minimum Cost Estimate
Neighbhd Emphasis	4,283	$ 45,635,000	$ 25,655,000
Community Emphasis	3,997	$ 35,685,000	$ 23,287,000
City Park	10,266	$ 89,478,000	$ 64,563,000
Total Class I	18,546	$171,000,000	$113,500,000
District Park	6,321	$113,772,000	$ 74,999,000
County Park	38,412	$ 94,378,000	$ 74,250,000
SORA Low	2,583	$ 17,040,000	$ 11,366,000
SORA Medium	50,320	$243,197,000	$162,212,000
SORA High	7,689	(c)	(c)
Total Class II	105,325	$468,387,000(d)	$322,827,000
III SORA Low	377,187	$188,594,000	$150,875,000
State Park	46,176	$ 44,651,000	$ 27,781,000
Destin. Park	295,373	(a)	(a)
Total (b) Class III	423,363	$230,245,000(b)	$178,656,000(b)
State Totals	547,234(b)	$869,632,000(b)(d)	$614,983,000(b)(d)

(a) "Destination Parks" are basically large National Parks. Due to the nature of these areas, no cost estimates were computed.

(b) Excluding "Destination Parks"

(c) Due to the nature of SORA High areas, a reasonable cost figure was incalculable.

(d) Excluding "SORA High"

Chapter II — Summary of Findings, Policies, and Recommendations — 24-0.00 thru 24-1.10

Plan Formulation 24-0.00

A plan of action must be developed within some framework which gives it direction and purpose. The framework for the North Carolina outdoor action program consist of (1) outdoor recreation objectives, (2) needs, problems and opportunities, and (3) roles of the public, private and commercial sectors. This framework is illustrated in Figure II-1.

Outdoor Recreation Objectives 24-1.00

The State has three broad and complementary objectives with respect to outdoor recreation: (1) providing outdoor recreation opportunities for the people, (2) preserving outdoor recreation areas for the use of people, and (3) effective and efficient resource use.

Providing Outdoor Recreation Opportunities for the People 24-1.10

It is an objective of the State to provide, or facilitate the provision of, outdoor recreation opportunities for all citizens and visitors, including the disabled and the institutionalized. There should be a wide variety of quality recreation opportunities readily accessible to all and under the leadership and administration of competent personnel. Outdoor recreation should be recognized as a necessary public expense at all governmental levels, and outdoor recreation investment by the private and commercial sectors should be encouraged. In addition, education and research efforts must be devoted to recognizing and meeting the outdoor recreation needs and desires of the people.

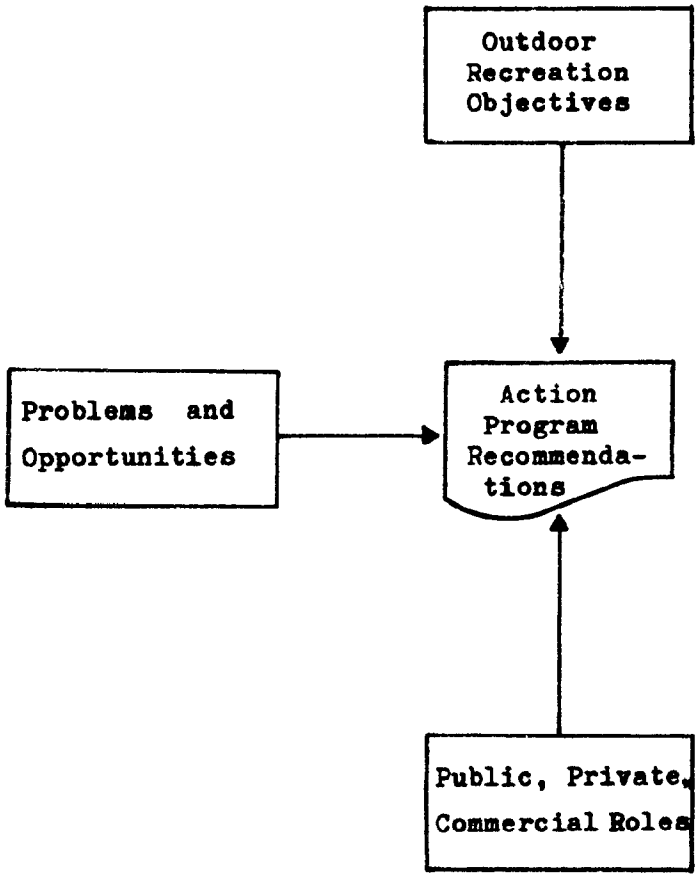


FIGURE II. 1 (24-0.00)

Framework For Development of Action Program

Chapter II — 24-1.20 thru 24-1.30
Summary of Findings, Policies, and Recommendations

Preserving Outdoor Recreation Areas for Use by People — 24-1.20

It is an objective of the State to acquire adequate examples of natural outdoor features and to preserve them in as close to a natural state as is feasible. Furthermore, it is an objective of the State that such natural features be made accessible to the public for the purpose of outdoor recreation to the extent that such use does not destroy or degrade the resource.

It is an objective of the State that adequate amounts of recreation areas be made available to the increasing urban population of the State; that areas of public access be provided along the shores of streams, rivers, lakes, estuaries, sounds, and the ocean; and that development and growth be planned and accomplished with an awareness of ecological principles and through adherence to development and management criteria that eliminate, or mitigate, detrimental effects on the environment.

Effective and Efficient Resource Use — 24-1.30

It is an objective of the State to maintain a continuing planning program for outdoor recreation and to use the products and the process of this program as guides for decision-making in the management of State outdoor recreation programs and services.

It is an objective of the State that all levels of government, the private sector and the commercial sector work cooperatively and without duplication to meet identified outdoor recreation needs.

It is an objective of the State to provide technical and advisory services in helping to achieve these objectives.

Chapter II	24-2.00 thru
Summary of Findings, Policies, and Recommendations	24-2.20

Present Outdoor Recreation Roles 24-2.00

No single sector--public, private or commercial--and no single level of government--Federal, State, or local--can meet the total needs for outdoor recreation. It takes the cooperative efforts of all. Each sector has established precedents for its specific share of the total outdoor recreation load. The following is a brief description of the type and degree of contribution--in terms of areas and facilities--that each sector makes to outdoor recreation.

State 24-2.10

The state is fulfilling the following roles:

1. The primary supplier of Class VI outdoor recreation areas in terms of both number of sites (51.4% of total) and total acreage (60.8% of total).

2. A provider of, in descending order of magnitude (acres and sites), Classes IV, III, and II outdoor recreation areas.

3. The operator of 5.5% of the total outdoor recreation sites in North Carolina and 7.4% of the total acreage.

Local Governments 24-2.20

Local Governments are fulfilling the following roles:

1. The major suppliers of Class I outdoor recreation areas in terms of both number of sites (74% of the total) and total acreage (83% of the total).

2. The providers of 17.1% of the total number of Class VI outdoor recreation sites and 5.2% of the total acreage in this class; 6% of the total number of Class II outdoor recreation sites and 9.6% of the acreage of this class; and a minor (0.5%) percentage of the Class III outdoor recreation sites in the State.

3. The operators of 30.9% of the total number of outdoor recreation sites and 1.4% of the total outdoor recreation acreage in the State.

Federal Government — 24-2.30

The Federal Government is fulfilling the following roles:

1. The only supplier of Class V outdoor recreation areas, as defined by the National Wilderness Act. The total acreage in the two wilderness areas in the State is 20,915 acres.

2. Sharing top place with the private sector as a supplier of Class IV outdoor recreation sites in terms of number of sites (37.5% of the total) and holding top place for this Class in terms of total acreage (77.4% of the total).

3. The supplier of the greatest number of acres in Class III outdoor recreation sites, although the private sector operates the greatest number of sites in this category. The federally operated acreage in this category (1,477,516) accounts for 78% of all Class III acreage in the State (1,897,513).

4. The operator of a small percentage of the total number of Class II and Class VI sites. However, a significant percentage (29.3%) of the total acreage in Class VI sites is under Federal operation. No Class I outdoor recreation sites are under Federal operation.

5. The operator of 5.1% of the total number of outdoor recreation sites in the State. In terms of acreage, the Federal Government operates 69.8% of the total outdoor recreation acreage in the State (2,179,322 acres), making it the major supplier in terms of acreage.

Private and Commercial 24-2.40

The private and commercial sectors are fulfilling the following roles:

1. The major suppliers of Class II opportunities in terms of both number of sites (84% of the total) and number of acres (86.8% of the total).

2. The major suppliers of Class III opportunities in terms of number of sites (44% of the total).

3. Sharing with the Federal Government the role of major suppliers of Class IV opportunities in terms of number of sites (37.5% of the total).

4. The suppliers of, in descending order of magnitude (in terms of number of sites and number of acres), Class I and Class VI opportunities.

5. The operators of 58.5% of the total number of outdoor recreation sites in the State. These sites make up 21.4% of the total outdoor recreation acreage.

TABLE II. 6

(24-2.00)

SUMMARY OF SUPPLY IN SITES AND ACRES-1971

	FEDERAL		STATE		LOCAL		COMMERCIAL PRIVATE	
BOR Class	% Sites	% Acres	% Sites	% Acres	% Sites	% Acres	% Sites	% Acres
I					74*	83*	26	17
II	4	1.6	6	2	6	9.6	84*	86.8*
III	36	78*	19.5	8	.5		44*	14
IV	(37.5)	77.4*	25	20.8			(37.5)	1.8
V	100*	100*						
VI	8.6	29.3	51.4*	60.8*	17.1	5.2	22.9	4.7
Total	5.1	69.8*	5.5	7.4	30.9	1.4	58.5*	21.4

* Indicates top supplier in the State
() Indicates tie-for-top supplier

Problems and Opportunities — 24-3.00

The following problem areas affect the delivery of outdoor recreation opportunities within the State: (1) inadequate land use controls, (2) lack of sufficient financial support, (3) inequitable distribution of outdoor recreation opportunities, and (4) less than optimum effectiveness and efficiency in the administration of State outdoor recreation services.

Inadequate Land Use Controls — 24-3.10

The lack of land use controls is allowing a continuing despoilation and exploitation of vital natural areas that are important to outdoor recreation use, as well as to other beneficial uses.

Chapter II
Summary of Findings, Policies, and Recommendations — 24-3.20 thru 24-3.40

Lack of Sufficient Financial Support — 24-3.20

The future progress of outdoor recreation in North Carolina is dependent on finding ways to provide adequate funds for acquisition, development and management of recreation areas and services. This problem necessitates a reasonable level of funding, proper timing and the coordination of planning and expenditures.

Inequitable Distribution of Outdoor Recreation Opportunities — 24-3.30

There are many instances where outdoor recreation areas and services are inequitably distributed in terms of population distribution. In addition, there are inequities in the sharing of the total outdoor recreation responsibility among the various types of operators. Another inequity is the additional burden--and sometimes impossibility--of access which the handicapped person often encounters at recreation sites and in the programs and activities taking place thereon. A final aspect of the inequitable distribution of outdoor recreation opportunities is that some resources are being used to their limit--and beyond--while others are not used to their optimum. This places a disproportional burden on some resources while, at the same time, preventing the most efficient use of other resources.

Less Than Optimum Effectiveness And Efficiency in the Administration of State Outdoor Recreation Services — 24-3.40

There is a continuing need to update data and information of concern to outdoor recreation interests in the State. In addition, other aspects--the quality, quantity and variety--of the State's technical assistance services for outdoor recreation are in continuing need of improvement and updating.

The State is getting less than optimum effectiveness and efficiency in the administration of outdoor recreation services because of the fragmentation of outdoor recreation planning, Land and Water Conservation Fund Project administration, and outdoor recreation project implementation within State government. All outdoor recreation activities within State government need to be brought into a common thrust for an aggressive outdoor recreation program.

Finally, there is need for an up-to-date assessment of the facility and program needs for all phases and sectors of outdoor recreation within the State.

Chapter II — Summary of Findings, Policies, and Recommendations — 25-0.00 thru 25-1.00

State Action Program 25-0.00

The following are the actions the State of North Carolina will take to attain its outdoor recreation objectives. Although this action program is oriented to State actions only, it does provide a framework within which other sectors can operate.

Recommendations Concerning Land Use Planning and Control 25-1.00

1. North Carolina outdoor recreation planners should both monitor the progress and be a part of the process of land use planning and control in order to assure attention to outdoor recreation objectives and goals.

2. Planners representing various recreation and recreation-related interests within State and local government and a group representative of the managers of all classes of outdoor recreation sites in the State should be invited to actively participate in the formulation of a statewide land classification system at the policy and decision-making level.

3. A two-year work schedule should be developed and implemented for the completion of the inventory and cataloguing tasks of the State Natural Areas Program by June 30, 1976.

4. It is recommended that:

   a. Land use management principles, criteria and procedures be developed (in a manner similar to the unit management plans developed by the U. S. Forest Service) for each park or recreation area operated or managed by the State; and that such principles, criteria and procedures be submitted to the Department of Natural and Economic Resources review process for environmental impact statements, following which such procedures be implemented by the appropriate agency of State government.

b. As a part of the State's technical assistance program in recreation, an information packet be developed to guide recreation administrators in using principles and practices for managing recreation areas in a manner harmonious with maintaining a quality environment.

c. A continuing effort be made to refine the system for screening Land and Water Conservation Fund projects in terms of the environmental effects of such projects.

5. It is recommended that:

a. A clear policy statement be developed and approved which includes the State's policy concerning access to and planning for recreation use of lakes and reservoirs.

b. An evaluation be made of the present and potential recreation needs capable of being satisfied by each of the existing reservoir proposals.

c. An evaluation be made of the future recreation needs for reservoirs on a statewide and regional basis.

d. A recreation plan be required for all reservoirs with a surface area of 1,000 acres or more.

e. Water resource development projects, in order to receive State approval, be required to provide adequate land for public access.

f. There be a clarification and strict enforcement of the State policy for State-owned lakes to assure public access to them.

Chapter II — 25-2.00 thru
Summary of Findings, Policies, and Recommendations — 25-3.00

Recommendations Concerning Insufficient Financial Support for Outdoor Recreation — 25-2.00

1. There should be $16,122,400 appropriated for the State Parks Capital Improvement Budget for 1973-75.

2. Increased funds should be made available for: the addition of recreation areas on reservoirs, the State historic preservation program, State Forest recreation areas and the State wildlife resources program.

3. Improvements should be made in State fiscal planning and control for recreation as well as the coordination of budgeting State funds for recreation.

4. A State grant-in-aid program of $2,500,000 per year should be established for acquisition of areas at the local level.

5. Proposals to obtain increased financial support for recreation at the local level from public funds should be strongly supported.

6. Increased efforts should be made to obtain funds, other than government appropriations, from such sources as foundations, fund raising campaigns, business contributions, and fees and charges for recreation activities.

Recommendations Concerning the Inequitable Distribution of Outdoor Recreation Opportunities on a Statewide Basis — 25-3.00

1. It is recommended that the capabilities of local units of government to meet identified outdoor recreation needs be improved through:

   a. Assisting local government in identifying these needs.

b. Providing more administrative flexibility for local governments through amendments to the recreation enabling law, especially to clarify the authority of local governments to acquire, develop and administer recreation areas, facilities and programs outside their boundaries.

c. A State-sponsored and financed grant-in-aid program to supplement Federal and local financial programs for outdoor recreation at the local level.

d. Clarifying existing legislation concerning the provision of outdoor recreation areas by developers of residential subdivisions.

e. Legislation that would, for recreation purposes, allow for the purchase, at raw land value, of land that is being developed, especially near urban areas.

f. Encouraging solicitations for supplemental funds and other support such as gifts, bequests, and foundation grants.

g. Developing, through the State's technical assistance service, a program to assist local governments in ways of increasing efficiency, thus making existing funds go further in providing services. Such a program should include guidance in securing grant assistance.

2. It is recommended that the State, guided by current outdoor recreation needs data and the following directives, expand the number and variety of State-administered outdoor recreation opportunities.

a. Acquire, develop and administer public water access areas at intervals on the coast and other places in the coastal area.

b. Acquire, develop and administer access sites to rivers, lakes, streams and reservoirs.

c. Implement the State Natural Rivers Act.

d. Expand the system of State-administered natural areas, following completion of the inventory and cataloguing.

e. Establish a statewide trails system and assure the perpetuation of public access to the Appalachian Trail in the State.

f. Accelerate efforts to identify, acquire and preserve (or restore) areas and facilities of statewide historic/cultural significance, and acquire additional trained personnel to plan and implement historic restoration and preservation programs, including research to determine what is of statewide historic significance.

g. Establish a natural areas trust and a natural areas preservation program.

h. Develop and implement a system of scenic roads and highways, including (1) practical methods to better protect, restore, and enhance corridors of scenic value traversed by highways, and (2) better control of unsightly features.

Recommendations Concerning the Overall Administration of State Outdoor Recreation Programs and Services — 25-4.00

1. Responsibility for major outdoor recreation functions of State government should be placed in one department.

2. Effective SCORP planning capabilities should be increased.

3. Outdoor Recreation planning should be made a staff function in the Office of Recreation Resources, Department of Natural and Economic Resources.

4. A Task Force for Recreation Resources in North Carolina should be established.

5. Continuing efforts should be made to strengthen and improve the present technical assistance service of the State in recreation.

6. Policies and procedures to guide the administration of the LWCF Program within the State should be developed and carried out.

7. The SCORP should be taken to the people in a series of conferences or hearings scheduled sequentially throughout the State.

8. A study should be undertaken to determine the need for and benefits of the institution of an annual meeting of representatives from the varied recreation interests in the State.

9. A periodical newsletter, bulletin or magazine should be published by the State's technical assistance service to disseminate information about recreation matters that may be of concern to citizens and recreation professionals in the State.

10. Outdoor recreation planning efforts within the State should make as great a use as is practical of multi-jurisdictional and multi-disciplinary planning to achieve greater flexibility.

11. The SCORP planning staff should be represented on all major and significant recreation undertakings in the State.

12. The State's technical assistance service should continue diligent efforts to encourage and assist in coordinating recreation programs and efforts of and with the local governmental sector.

13. Architectural barriers should be eliminated from existing and proposed outdoor recreation projects to the extent practical.

14. The optimum use of existing and potential recreation resources should be attained through such methods as:

    a. Developing and implementing optimum carrying capacities for various classes and types of outdoor recreation areas;

    b. Establishing criteria for development of recreation areas to sustain optimum use;

    c. Remaining alert to improvements in materials and techniques for development, construction and maintenance of recreation areas and facilities; and

    d. Attaining greater compatible uses of flood plains for recreation.

15. The quantity and quality of recreation staffing should be continually improved through such methods as manpower studies, in-service training programs, improvement in recreation curricula and recreation research.

16. Intensified efforts should be made to instill a better knowledge of, and appreciation for, the State's outdoor recreation resources and their proper use.

Chapter III	30-0.00
Environment for Outdoor Recreation	31-0.00

History 31-0.00

The first European who is known to have explored the coast of what is now North Carolina was Grovannie de Verrazzano in the year 1524. He was followed in 1526 by Ayllon, in 1540 by Hernando de Soto, and in 1561 by Vellafane. Pardo and Boyano led an expedition into North Carolina in 1566-67. None of these explorations resulted in an attempt to establish a settlement.

The first colony was established by a group sent by Sir Walter Raleigh. They landed on Roanoke Island in 1584 and became a part of history as the "Lost Colony". Their ship had been taken to England to bring additional supplies. When the ship returned to Roanoke Island in 1587, none of the settlers were found nor was there any trace of what might have happened. There was further exploration, but the first permanent settlement was not achieved until around 1653.

From the year 1663 until 1729 the State was governed as a proprietory colony which involved a grant from the King of England to eight men for "all of Carolina". The territory included all the land between the present Virginia boundary and a line through central Florida, and"from sea to sea". After years of trouble, confusion, slow growth, and poor government, the colony was divided into three regions with North Carolina as the northern most--hence the name "the Old North State". And in 1729 seven of the eight "proprietors" sold their grant to the King of England, and North Carolina became a Royal Colony. The major problems of this period were the Cary Rebellion resulting from a fight over the Established Church, war with the Tuscarora Indians, a boundary dispute with Virginia and pirating along the coast. Well known pirates of the day included Edward Teach (known as Blackbeard) and Steve Bonnet.

From 1729 to 1775 the Royal Colony experienced rapid growth. Agriculture and industry expanded along with the development of a social order and a greatly improved standard of living. There was expanded settlement including the Cape Fear River Valley, the Piedmont and the mountains. Trade increased, a crude postal system was

started and the first books and newspapers were published. These, in turn, provided better homes, finer furniture, more and better tools and more comfortable living conditions. This was also the period of rapid growth of dissenting religious sects. There were some attempts to improve the transportation system, but the State suffered poor transportation until the era of railroads in the 1840's and 1850's. Also, the road system remained poor up until the 1920's and 1930's.

North Carolina was involved in the French-English wars as an English colony. These wars placed large debts on England, and England proposed new taxes on the colonies to relieve the burden. It was these taxes that led to dissatisfaction, resistance to the crown, and the Revolutionary War. Economic boycotts were used, and a "Regulator" movement was started. When the shooting started in 1775, North Carolina had already disposed of the Royal Governor and started a substitute government. A female "Tea Party" had been held at Edenton, and the development of a set of "Resolves" leading to independence had begun. Major military actions in North Carolina were at Moore's Creek Bridge, Kings Mountain, and Guilford Courthouse.

As a result of the Revolutionary War, and the repression causing it, the State was in disorder and very poor. While settlement continued, there was very little real progress or economic improvement. There was a State constitution that provided for rather poor representation. There was very little consideration given to public schools, internal improvement, a transportation system, or constitutional reform.

With a change in the State constitution in 1835 there was a beginning of improvement. A public school law was passed and within 15 years every county had at least one public school. There were several major colleges established. Railroads were built and a start was made on a road system. Agricultural and industrial growth were greatly improved. A school for the deaf and a hospital for the insane were opened. This was a period of true progress which continued until it was interrupted by the Civil War.

The Civil War is an event that is well recorded and well known. This description of state characteristics will not discuss it at any length except to state that it halted progress, caused much destruction and left negative effects on the economy and the standard of living. The period of reconstruction and recovery was difficult.

When the soldier returned home, he went to work to rebuild his farm, business or return to employment. While progress was difficult, it did take place and in many areas it was fairly rapid. General industrial progress was good. It was the post-war period that saw great expansion in the textile industry, tobacco, furniture manufacturing and in transportation and communications. Similar progress was made in education after a slow start from the destruction and disruption of schools during the war. Agriculture was the only phase that was slow to recover.

In fact, it was not until after 1900 that agriculture took its place as a recovered and progressing industry. From 1900 to the present time agriculture has expanded along with other fields of endeavor. During this period railroad construction continued, ocean ports were developed, the airplane industry began at Kill Devil Hills, and the State made its greatest progress in construction of a highway system. Industrialization continued at an increasing rate with North Carolina becoming the leading industrial State of the Southeast. Textiles became the major industry of the State, and there was continued rapid increase in tobacco manufacturing. Forest products expanded but in areas different from the States' leadership in tar and turpentine.

With the improved and expanded economy after 1900 serious attention was given to "noneconomic" fields. Education was put on a sound basis and many improvements were made in school construction. The school term was increased from four to nine months, colleges were expanded, and libraries were built. Newspapers and other publications increased, and writers emerged as well known figures. There was a large increase in church memberships.

Chapter III	31-0.00 thru
Environment for Outdoor Recreation	31-1.00

World Wars I and II had negative effects, but they did not cause the great disruption of earlier wars. In fact, military installations became a factor in the economy during and after the World Wars. In addition, the State assumed a national political role that had been missing since before the Civil War. During World War I there were leaders from North Carolina who filled important political positions, and from this start, there were significant roles played in all administrations, especially those of the Democratic party.

Recreation 31-1.00

Recreation has been an important aspect of life in North Carolina throughout its development. In the early years, the settlers engaged in such activities as hunting, fishing, hiking, camping, and horseback riding. While there were reasons of economics and necessity involved, pleasure and relaxation were derived from these activities. Much of their work and living was in a natural scene so there was early appreciation and concern for natural resources.

The more formal development of recreation areas to provide facilities for organized activities did not begin until after 1900. The Great Smoky National Park was established in 1930, and the Blue Ridge Parkway was begun in 1936. National Seashores were established at Cape Hatteras in 1950 and Cape Lookout in 1966.

The development of a State Park System was begun in 1915 with the establishment of Mount Mitchell State Park. Since that start, others have been developed so there are now more than 47,000 acres in State Parks located in all sections of the State. The following add balance: a State recreation area on Kerr Reservoir, several historic sites, boating access areas, N. C. Forest Service group camps, natural areas and game hunting areas. The cities have developed programs to provide recreation to the urban dweller.

Chapter III — 32-0.00 thru 32-1.00
Environment for Outdoor Recreation

Physical Environment for Outdoor Recreation — 32-0.00

Introduction — 32-1.00

An examination of outdoor recreation needs and potentials in North Carolina requires that one have an understanding of the State itself. Both the needs for outdoor recreation and the potential for its development are closely interconnected with the State's physical setting and its current and prospective socioeconomic conditions. These aspects are examined in detail in this section to provide the basis for a better appreciation of the environment for outdoor recreation in North Carolina and the constraints under which future developments must occur.

It is difficult to make generalizations about North Carolina as a whole. Between the western mountains and the eastern seashore there are significant differences in the physical landscape, population density, income levels, transportation facilities, education levels, and recreation facilities. What may be generally true in one section may not be true in another. It is therefore imperative that each facet of outdoor recreation be reviewed within the proper geographic context.

North Carolina has attracted attention as a sourthern state concerned with improving economic, social, educational, and recreational conditions. Among all the states, North Carolina ranks high in the rate of economic growth, and in the magnitude and intensity of manufacturing. The ratio of expenditures on public education to total personal income is among the highest in the Nation. In political matters, the State's voters have generally rejected extremist candidates in favor of political moderates. The State has made rapid social progress during the past fifteen years.

Several factors tend to distinguish North Carolina from other states of similar size and level of industrialization. Income levels are substantially below the national mean. The large industrial labor force (700,000) is concentrated in low-wage, labor-intensive, low-profit-margin sectors (textiles, apparel, furniture, and food

products). Agricultural wages are generally low, and opportunities for off-season employment are limited. The level of urbanization, while growing, is below the national average. There are many small and medium-sized towns, but relatively few large ones. Four cities exceed the 100,000 population level: Charlotte, Greensboro, Winston-Salem, and Raleigh. The low level of urbanization is surprising in view of a level of industrialization that is well above the national average. Over half of the State's factory workers live in rural areas. This suggests that North Carolina may be able to continue to expand without having to cope with some of the problems currently facing many large cities. There are, of course, additional factors tending to distinguish North Carolina, such as the large non-white population (one-fourth of the total) and a lower cost of living than the Northern urban-industrial states.

The environmental and natural resources suitable for outdoor recreation have earned for the State the title of "Variety Vacationland". A description of these resources is being presented to fully support this title. Programs to provide for the protection, conservation, preservation and management of these resources are evolving at a high rate. High priority attention is being given to these programs by all levels of government so that reasonable development can take place. It is encouraging to note that an identification of the major characteristics and needs of the environmental resources is slowly emerging from the great mass of discussion.

These are some of the factors that must be borne in mind when examining outdoor recreation in North Carolina. To a large extent these factors influence supply and demand which in turn determine the recreation needs of the State's population.

Size and Location — 32-2.00

North Carolina is among the largest and most populous states in the South. With an area of 52,712 square miles (including inland water) and a population of 5,082,059 in 1970, its population per square mile is about 100. In area, the State ranks 28th nationally. North Carolina enjoys a geographic position midway between New York City and northern Florida.

Chapter III — 32-2.00 thru 32-3.10

Environment for Outdoor Recreation

The Appalachian Mountains along the western border of the State tend to restrict the surface movement of goods and people to and from areas to the west and northwest of North Carolina. Most interstate traffic moves north-south or northeast-southwest. However, with the completion of the Federal interstate highway network, traffic between points to the west and northwest should increase, thus bringing North Carolina effectively closer to Chicago and the Middle West.

Land Resources 32-3.00

In its broadest application it can be said that how we use--or misuse--land is probably the most important factor involved in environmental quality. This is where we live, do business, conduct service operations and carry out industrial production. In addition, we use land for recreation--to build reservoirs and parks and to develop other types of recreation areas. How we use the land for these purposes has its effect on the land involved, and is a concern to the immediate community. Also, how land is used can have effects on areas beyond the local scene within a region or even the nation.

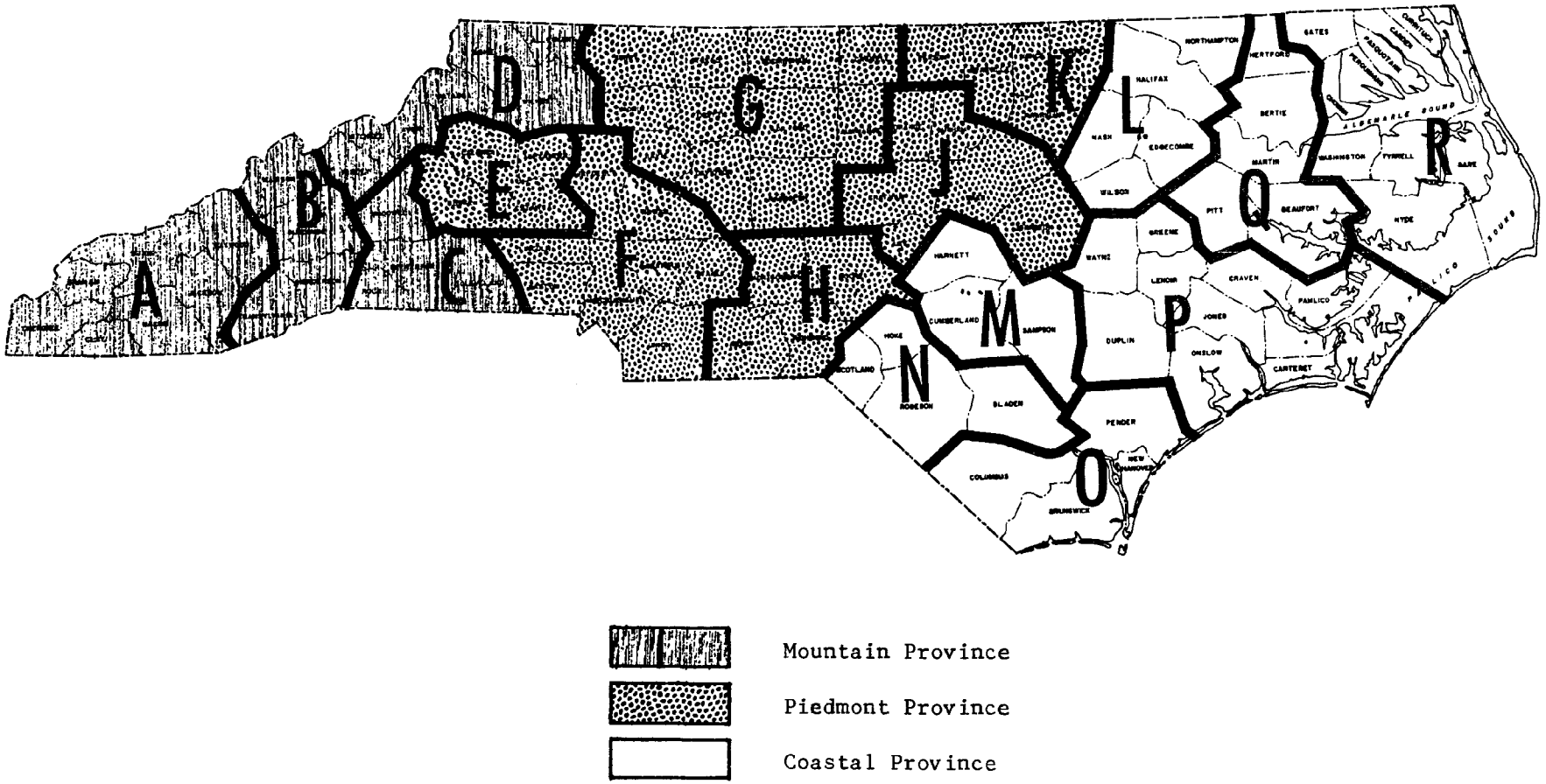
North Carolina is blessed with great varieties of land that is well suited or can be readily adapted to recreation use. The land area can be divided into three distinct landscape types or geological provinces; the Mountains, Piedmont, and Coastal Plains. There are interesting differences both between and within each of these areas in terms of uses and degree of developments.

Mountain Province 32-3.10

The mountain province includes 22 western counties with an area of 9,127 square miles. There are 1,829 square miles of federal land (national parks and forests), 316 square miles of urban and built up land, and 31 square miles are covered with water in small lakes and reservoirs up to 40 acres in size--(larger lakes and reservoirs are discussed in a special study--Lakes and Reservoirs for Recreation in North Carolina). The remaining land consists of agricultural and private lands and is presently being used for cropland (13%), pasture (12%), forests (72%), and all other uses (3%). Some of the highest

FIGURE III.1 (32-3.10)

NORTH CAROLINA MULTI-COUNTY PLANNING REGIONS AND CONFORMING GEOGRAPHIC PROVINCES



elevations in the eastern United States are in this area including Mount Mitchell, the highest point. It is characterized by deep valleys, heavy and beautiful forest cover, clear cold streams, and outstanding scenic values that can be enjoyed by use of the large number of overlook points, trails and scenic roads.

Piedmont Province — 32-3.20

The piedmont area includes 38 counties in the central part of the State and has a total area of 18,380 square miles. Of this total, 255 square miles are in Federal ownership, 1,336 square miles are urban and 91 square miles are covered by water in small lakes and reservoirs. The remaining area has a present use divided into cropland (25%), pasture (8%), woodland (63%), and all other (4%). The topography is that of low rolling hills with a large variety of soils that are irregular in quality but are generally well drained, sandy and acid in reaction. Elevation differences are not great and the hills are only rarely abrupt in change. There are several large rivers that cross the area, and they have cut rather deep valleys. This feature makes reservoir construction practical and the rivers contain several major dams. This is the part of the State that contains the major portion of its population, large cities and industrial development. There is also greater agricultural use of the land than was true of the mountain area but woodland is the major use of the land.

Coastal Plains Province — 32-3.30

The eastern part of the State is in the Coastal Plains which at one time in geologic history was under the ocean. The total area, in 40 counties, is 21,448 square miles of which 850 square miles are federal land, 632 square miles are urban land, and 98 square miles are in small lakes and reservoirs. The remaining land is used as cropland (26%), pasture (2%), forest (66%), and all other (6%). Its major characteristics are very flat landform, poorly drained soils, large

areas of swamp and wooded areas consisting primarily of pine trees. Much of the land has artificial drainage and is intensively used for crop production. As in other provinces, a major portion of the land is covered with woods. The sandhills along the eastern part and the islands or sandbars that extend along the coastline are interesting variations within the province.

Water Resources 32-4.00

The variety of water resources is as great as that of the land resources. Starting on the east and south is the sea and surf of the coastline. Just inside the coastline are the very large sounds and the estuaries of the Roanoke, Tar, Neuse and Cape Fear Rivers. The streams of the Coastal Plains are shallow, wide and sluggish. The water is dark in color due to drainage through great masses of organic material. In the Piedmont the streams are very frequently shallow (due to sedimentation) and are colored with sediments from the red-clay soils. Also, they flow with greater velocity and contain pools and riffles. The mountain section has clear streams that flow with greater velocity. Pools are less frequent and the waters have a much lower temperature than either the Piedmont or Coastal Plain creeks and rivers.

Surface waters are available in great quantity. The major sounds have a total surface area in excess of 1,600,000 acres. There are also large numbers of ponds, lakes and reservoirs. There are 135 lakes and reservoirs of 100 acres or more surface area in or partially within the State. The total surface area (within the State) of these lakes and reservoirs is 321,278 acres. The number of ponds and small lakes is in excess of 65,000. While measurements of surface area are not available for ponds and small lakes of less than 100 acres, it is estimated to be at least 141,000 acres. In total, all types of surface waters approach 2.5 million acres for the State.

There are differences in these waters that produce differences in aquatic vegetation as well as the vegetation along the banks. The fish and other aquatic life also differ. The cold, clear streams of

the Mountains contain trout. The Piedmont streams have bass and catfish while the Coastal streams have bluegill and redbreast sunfish in addition to several species of migratory fish. The sounds also contain a large number of different species of aquatic life due to the variation from high salinity to fresh water.

Rainfall is rather uniform throughout the year with summer months experiencing slightly greater amounts. As a result stream flow characteristics are good. There is greater variation in stream flow in the summer. Annual rainfall varies from about 40 to 60 inches with higher rainfall in the mountains and along the coast.

The quantity of rainfall and stream flow should be considered very good, as judged by the lack of frequent extremes of high and low flow. Ponds, lakes and reservoirs are relatively stable so that extreme high or low stages are uncommon. The quality of the water resources, however, presents problems at this time and raises serious questions about the future. There are serious water problems and there is some degree of uncertainty as to whether or not the resources necessary to overcome them will be committed.

TABLE III-1

(32-4.00)

SUMMARY OF LAND AND WATER RESOURCES

Land Area		31,331,346 Acres
Forested	20,374,442	
Agricultural Land	9,495,193	
Urban and Built Up	1,461,711	
Land Used for Recreation		1,955,352
Water Area		2,404,700 Acres
Sounds	1,600,000	
Large lakes & reservoirs	321,000	
Small lakes & ponds	141,000	
Salt marsh	158,000	
Freshwater marsh	47,500	
Other; streams, rivers	136,900	

TABLE III-1 (Cont'd)

SUMMARY OF LAND AND WATER RESOURCES

Shoreline	
Ocean Beach	285 miles
Marsh shore	781 miles
Bluff shore	260 miles
Rivers & streams	In excess of 40,000 miles
Cultural/Historic Sites	In excess of 1,900

Air Resources 32-5.00

For too long air has been treated as an infinite resource; one that has no characteristics that can be measured. It has been assumed that it contained some miraculous capability to absorb large amounts of waste that can be easily assimilated. As we drive into an area of murky atmosphere--sometimes given the high sounding title of smog or even misnamed fog--we realize that air has finite capacities for absorbing wastes. With a little reflection we also can conclude that it is being damaged and that the car we drive is a contributing factor.

Air has many characteristics. It is hot, warm or cold. It is wet or dry; it is winter, spring, summer and fall, and we are exposed to such conditions as highs, lows, cyclonic storms, cold fronts, and inversions. The characteristics of air change according to climate and weather; and it contains varying amounts of a very large number of pollutants--smoke, dust, bacteria, car emissions, pollen, and noise. All of these items together make up our air resources.

Probably the best feature--for recreation purposes--of our air resources is its climate which is classified as subtropical (except in the Mountains). As with other resources, the great variety is a plus factor. Along the Coast there is mild weather for most of the year with summer months being rather hot and humid. Summer temperatures in the Mountains, however, are very pleasant. For those who enjoy crisp winter weather, the Mountains have low temperature and the higher altitudes have 15 to 30 inches of snow annually. The "change" seasons--spring and fall--are long and very pleasant, with spring flowers and fall foliage transforming the countryside into the appearance of a garden.

Storms are a major feature of climate. Winter storms in the Mountains can be unpleasant with winds, snow and ice that cause damage. Along the seacoast hurricanes are infrequent, but when they do occur, they are very damaging. In the central part of the State the major concern is ice storms that damage vegetation, disrupt utilities and create safety hazards for all types of transportation.

Natural Resources — 32-6.00

North Carolina has many natural areas that have unique or outstanding features, are relatively "untrammeled by man", or that have scientific importance. A complete listing will not be attempted here because of the great number. Rather, the several types of resources found in the State and a few examples of each will be indicated.

Forests — 32-6.10

The forests of North Carolina provide natural areas in very large quantity since a major portion of the land is forested. Approximately 75% of the State is forested, and such areas are distributed over all sections. In the west the major species are hardwodds. Commercial harvests occurred in many areas but regrowth was primarily hardwoods.

A similar condition exists in the eastern section. The predominant species are pine and regrowth after cutting is pine even though there has been some change in pine species.

The Central or Piedmont area has a mixed type of woodland. Originally, the woods were hardwoods but much land was cleared for farming and other uses. As the cleared areas returned to woodland the common type of tree was pine.

State and National Forests in North Carolina include: Bladen Lakes State Forest, Hofmann State Forest, Nantahala National Forest, Pisgah National Forest, Uwharrie National Forest, and Croatan National Forest.

Geological Formations 32-6.20

The following are examples of some of the geological formations in the State.

Fall Line

The approximate point where the Piedmont and Coastal Plains provinces join is known as the fall line. Streams there are usually in gorges with rapids or small waterfalls. There is also some difference in vegetation on each side of the fall line.

Looking Glass Mountain

This is a large, steep granite exposure that gives the appearance of glass when wet from water seepage.

Rocky Face in Alexander County

This is a remnant of a huge granite intrusion with bare rock about 150 feet high.

Roan Mountain

This is an example of bald-top mountains. They are the last vestiges of glaciation and are covered with grasses and other non-woody vegetation. Tree growth is slowly encroaching and will eventually cover the mountain tops.

Pilot Mountain

This is a remnant peak and a very interesting geological formation, commonly referred to as a monadnock.

Grandfather Mountain

This is a fine example of a very rugged mountain.

Chimney Rock

A hard remnant of granite resembling a chimney.

Cliffs of the Neuse

The Neuse River has cut into the upper Coastal Plains sediments and exposed a vertical section of an earlier formation.

Mines

There is an old mine in Montgomery County, a hiddenite mine in Alexander County, mica and felspar mines in Mitchell County and the only commercial marble mine in the State located in Cherokee County.

Natural Lakes 32-6.30

There are a number of medium to large natural lakes located in the eastern part of the State.

In Craven and Jones Counties there are five ground water lakes: Catfish Lake, Great Lake, Long Lake, Little Lake, Ellis Lake. These lakes are surrounded by peat bogs. They have narrow beaches, very acid water and are poor fish habitat.

Pungo Lake and New Lake are in Washington and Hyde Counties. They are similar to the lakes listed above. Phelps Lake has intensive agriculture nearby, and drainage canals are common in the area.

Lake Mattamuskeet in Hyde County is the largest lake in the State (42,000 acres). It is excellent water fowl habitat and has fair to good fishing water.

Bladen County has White Lake, Black Lake, Singletary Lake, Jones Lake and Salters Lake.

Pocosins, Swamps and Marshes 32-6.40

The word pocosin is an Indian word meaning "swamp on a hill". There are several large examples in North Carolina; Whiteoak Pocosin, Dover Pocosin, Bay City Pocosin and Angolia Bay Pocosin. These areas are usually of peaty soils, have very little--if any--natural drainage and are good wildlife habitat especially for bear and deer.

The major swamps are Green, Holly Shelter, Wolf, Gum, Hall, Dismal, East Dismal, and Angolia Swamps.

Marshes generally have not been named. There are extensive marshes along the shoreline of the sounds. In total, they exceed 200,000 acres.

All of the pocosins, swamps and marshes are in the Coastal Plains portion of the State.

State and National Parks

The State and National Parks are developed in a natural setting and must be included as a part of the natural resources of the State.

National Parks include:

Great Smoky Mountains National Park
Cape Hatteras National Seashore
Cape Lookout National Seashore
Blue Ridge Parkway

State Parks include:

Mt. Mitchell State Park
Mt. Jefferson State Park
Hanging Rock State Park
Duke Power State Park
Morrow Mountain State Park
Weymouth Woods Sandhills Nature Preserve
William B. Umstead State Park
Jones Lake State Park
Singletary Lake Group Camp
Cliffs of the Neuse State Park
Hammocks Beach State Park
Fort Macon State Park
Pettigrew State Park
Masonboro State Park
Raven Rock State Park
Boone's Cave State Park
Roosevelt Natural Area
Stone Mountain State Park
Pilot Mountain State Park

Other Natural Areas — 32-6.60

Carolina Bays--The bays are basins found over the southeastern part of the State. The origin is not certain, but the accepted theory is that they were caused by a shower of meteorites. They are oval shaped and are oriented NW-SE, with a sand ridge along the SE border. Some have water in the basin, others are wooded and some are cultivated.

Linville Caverns--Privately owned and operated caverns in McDowell County.

Pink Beds, Transylvania County--An area covered with pink blooming flowers at the head of Mills River.

Scenic Areas--A listing of scenic areas would duplicate many of the natural areas already mentioned. Specific mention will be limited to the scenic beauty of the deep gorges, waterfalls and rapids of the Nantahala, Pigeon, Green, Linville, and New Rivers as outstanding examples.

Cultural/Historical Resources — 32-7.00

The cultural and historical resources in the State are great in number, interest and significance. The task of locating, describing, and inventorying is being carried out by the Department of Archives and History. The Department is also working to study, preserve and/or restore as many of the sites as possible. A rather full description of those activities and an inventory of cultural-historic sites is contained in "An Interim, North Carolina State Plan for Historic Preservation", August 1970. The list is long and varied and contains in excess of 1900 sites.

Chapter III — Environment for Outdoor Recreation — 32-7.10 thru 32-7.30

Architectural Sites — 32-7.10

This category includes the greatest number of sites. These are private homes, mills, public buildings, churches, and other structures that are of interesting architectural style and are important because they contribute to the history of the State. There are mountain cabins, early stores and inns, homes of great State leaders of the past and buildings that were involved in early battles. Many other buildings are of importance due to their architecture rather than historic use. In total there are about 1000 sites in this category.

Aboriginal-Historic Sites — 32-7.20

Under this heading there are 20 sites listed. The properties are primarily Indian villages and meeting places. One site in Bertie County, however, is an early Indian reservation.

Military Sites — 32-7.30

North Carolina has been deeply involved in many wars and military actions which have contributed to the number of historic sites. The number in the Interim Plan is 122. There are sites that were involved in early Indian wars, the Revolutionary War, the Spainish-American War, the Civil War, and World Wars I and II. There are battle fields of several wars and of the "Regulators" who objected to very early colonial rule. Forts were also built to protect early settlers and as collection points for the Cherokee Indians prior to moving them to Oklahoma. The first English settlement on Roanoke Island felt the need for protection so Fort Raleigh was built. There are also several historic sites used as military headquarters, hospitals, cemeteries, prisons, and factories producing war supplies.

Fort Fisher, Fort Macon, and Fort Raleigh are now preserved and maintained as historic sites.

Chapter III — Environment for Outdoor Recreation — 32-7.40 thru 32-7.60

Political Sites — 32-7.40

North Carolina produced leaders in political matters as well as in military affairs, and the homes and offices of many important political leaders are included as historic sites. There are sites related to early settlements and cities, public governmental buildings, the State Convention, the several locations of the Colonial and State seats of government and the General Assembly. In addition to sites related to persons of statewide significance, there are sites related to North Carolinians who gained national prominence--cabinet officers, Supreme Court justices, signers of the Declaration of Independence, ambassadors to foreign countries, and three United States Presidents. There are a total of more than 200 properties listed in the Interim Plan in the Political category.

Religion/Philosophy Sites — 32-7.50

Since the early settlement of North Carolina, many of its citizens have been deeply interested and involved in religion and philosophy. The number of sites of historic interest (235) under this category is quite large--a fact which fully illustrates this deep involvement. There are many old churches, "meeting houses", religious schools, and homes of well-known religious teachers and leaders.

Education Sites — 32-7.60

In common with other early States, education was first carried out as a private action without public funds from tax sources. This held true until the advent of the "public school" system. As a result, there were large numbers of private and religious schools, colleges, universities, institutes and academies. Historic education sites number 148 including the schools and homes of well-known teachers and educators. There are properties involved all across the State, including several "first-of-its-kind", large and small institutions and several orphanages.

General or Other Sites 32-7.70

There are many additional headings that will not be described here. A mention of the headings should serve to indicate the interest and importance of properties as historic sites.

Agricultural
Art
Commerce
Communications
Conservation
Engineering
Industry
Invention
Landscape Architecture
Literature
Music
Science
Social/Humanitarian
Theater
Transportation
Urban Planning
Other-Historic Archeology
Other-History

This brief summary and description of the historic/cultural resources should provide some understanding of the amount, significance and importance of these properties and sites to the people of North Carolina.

Socioeconomic Characteristics 32-8.00

Recreation planning is concerned with the leisure time activities of people. Knowledge of the population and its characteristics--the total population, its distribution, economic status, education level and other characteristics--is essential. Future needs for acquisition and development must be based on an understanding of the present population and any trends that represent change in the overall characteristics.

Size and Composition of the Population 32-9.00

The population of North Carolina was in excess of 5 million in 1970. (See Table III-2) It is ranked 12th in the United States; below Indiana and just above Missouri, Georgia and Virginia. The population density is slightly above 100 people per square mile,

which is greater than the average for the Southeastern States. The total population is divided into 76.8% white, 22.2% Negro and 1.1% other. This represents an increase over 1960 population of white (2.2%), a decrease of Negro (2.3%) and an increase in the "other" category of 0.2%.

The total population increased by 11.5% over 1960. The urban population increased more than the rural.

TABLE III-2

(32-9.00)

SIZE AND COMPOSITION OF POPULATION

	1970	1960	Change 1960-1970	Percent Change
State	5,082,059	4,556,155	525,904	11.5
Urban	2,285,521	1,801,921	483,600	26.8
In large cities (1)	1,301,696	1,012,775	288,921	28.5
Other cities and towns (2)	599,704	535,523	64,181	12.0
Other (3)	384,121	253,623	130,498	51.5
Rural	2,796,538	2,754,234	42,304	1.5
Farm population	530,316	808,391	-278,075	-34.4
Rural non-farm	2,266,222	1,945,843	320,379	16.5

(1) In excess of 25,000
(2) 5,000 to 25,000
(3) 5,000 and smaller

The agricultural population decreased by 34.4%, following a long time trend, while the rural population increased by 1.5%. It is interesting to note that urban and rural nonfarm population is about equal and that the population of small cities and towns (under 5,000 population) showed a large increase between 1960 and 1970 (51.5% growth).

The age structure of the population has experienced some significant shifts from 1960 (see Table III-3). The proportion of children under 14 years has dropped by 5.6% while those between 14 and 25 years has increased by 4.3%. Other age groups experienced lesser change. The 65 and over group has increased from 6.9% to 8.1% and now numbers 414,120. The median age is now 26.5 years; up from 25.5 in 1960.

TABLE III-3

(32-9.00)

POPULATION BY AGE

Age Group	1970 (%)	1960 (%)
Under 14 (1-13)	26.5	32.1
14-24	21.4	17.1
25-34	12.7	12.9
35-44	11.6	13.1
45-64	19.7	17.9
65 and over	8.1	6.9

Distribution of Population 32-10.00

The population is distributed unevenly across the State (see Table III-4). The greatest concentrations are found in the Piedmont or central portion of the State, and to a lesser degree in the inner Coastal Plains. The smallest populations are found along the Coast and in the Mountains. Population distribution by

provinces is: Mountains 640,240 or 12.6%; Piedmont 2,875,233 or 56.5%; and Coastal Plains 1,566,586 or 30.9%.

As noted earlier, agricultural population is rapidly declining. They are located primarily in areas with heavy crop production emphasis--tobacco, corn, soybeans, peanuts--which are found in the inner part of the Coastal Plains. The rural nonfarm population is found near the agricultural service areas. It is also found more heavily concentrated near urban centers where large numbers are employed in industrial and commercial endeavors.

The population distribution is described further in Figure III-2, population density per square mile. There is variation from less than 25 people per square mile to more than 200. Six of the nine counties with less than 25 people per square mile are located near the Coast and the other three are in the Mountains. The tier of counties along the northern border have low density. The area known as the Piedmont Crescent is easily identified as running from Wake County through Durham, Alamance, Guilford, and Forsyth; then southwest to Cabarrus, Mecklenburg and Gaston Counties.

Although the population density exceeds the national average, there are few large cities; only four that exceed 100,000 population. Seventeen cities exceed 25,000 population and have a total population of 1,301,696 which is 25.6% of the total for the State. As with total population, these cities are concentrated in the Piedmont (ten of the seventeen). All of the six cities with populations in excess of 60,000 are in the Piedmont.

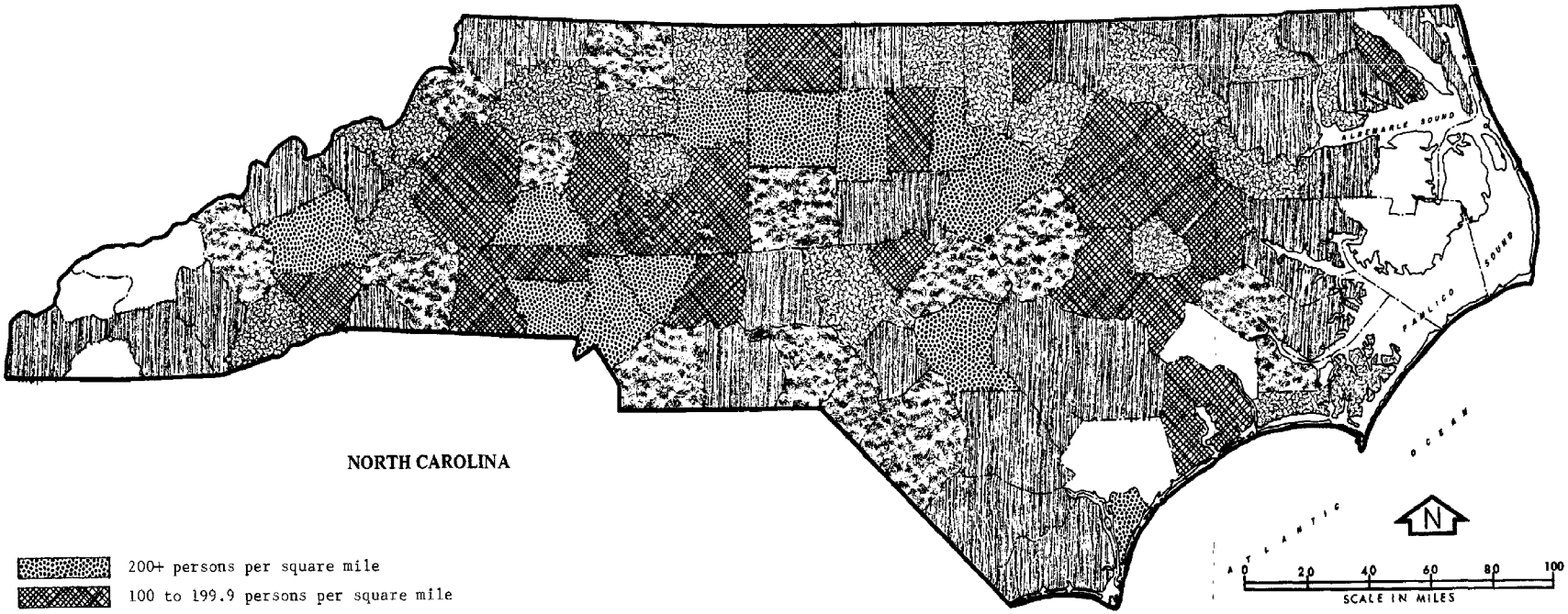
The distribution of population by race is shown in Table III-4. The Mountains have a greater percentage of white population than any other region (92.4%), while the Coastal Plains have a greater percentage of blacks than any other region (32.1%). The greatest number of other races is found in Region N due to a large concentration of American Indians.

TABLE III. 4

(32-10.00)

POPULATION DISTRIBUTION (1970)

	Total Population	White Population		Black Population		Other Population	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Mountains Region A	115,024	109,449	95.2	2,191	1.9	3,384	2.9
Region B	223,576	207,140	92.6	15,979	7.1	457	0.2
Region C	162,276	139,115	85.7	23,022	14.2	139	0.1
Region D	139,364	135,732	97.4	3,479	2.5	153	0.1
Sub-Total	640,240	591,436	92.4	44,671	7.0	4,133	0.7
Piedmont Region E	227,402	209,797	92.3	17,283	7.6	322	0.1
Region F	870,150	708,889	81.5	150,206	18.3	2,055	0.2
Region G	981,393	803,322	81.9	175,701	17.9	2,370	0.2
Region H	121,692	84,286	69.3	37,068	30.5	338	0.3
Region J	540,599	405,502	75.0	133,015	24.6	2,082	0.4
Region K	133,997	76,139	56.8	57,161	42.7	697	0.5
Sub-Total	2,875,233	2,287,935	79.6	597,434	20.2	7,864	0.3
Coastal Plains Region L	246,842	138,742	56.2	107,101	43.4	999	0.4
Region M	306,663	221,733	72.3	78,159	25.5	6,771	2.2
Region N	154,684	76,455	49.4	48,553	31.4	29,676	19.2
Region O	172,305	122,934	71.3	47,731	27.7	1,640	1.0
Region P	410,123	296,914	72.4	110,847	27.0	2,362	0.6
Region Q	178,667	105,242	58.9	73,201	41.0	224	0.1
Region R	97,302	60,376	62.1	36,781	37.8	145	0.1
Sub-Total	1,566,586	1,022,396	65.3	502,373	32.1	41,817	2.7
State Total	5,082,059	3,901,767	76.8	1,126,478	22.2	53,814	1.1



NORTH CAROLINA

- 200+ persons per square mile
- 100 to 199.9 persons per square mile
- 75 to 99.9 persons per square mile
- 50 to 74.9 persons per square mile
- 25 to 49.9 persons per square mile
- 0 to 24.9 persons per square mile

State average = 104.1 persons per square mile

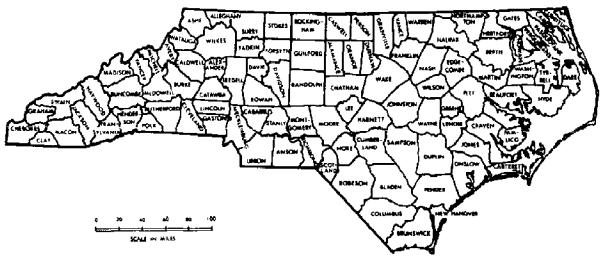


Figure III.2
(32-10.00)

NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
COUNTIES SHOWING:

POPULATION DENSITY*

*1970 Census

Chapter III — 32-10.00 thru 32-11.00

Environment for Outdoor Recreation

The past trends have been for uneven distribution of population across the State. Increases have been greatest in the urban-industrial area of the Piedmont and a few Coastal Plains counties. This was caused by a higher birth rate for urban centers and a migration from the rural to urban areas. To counteract this trend, there are State efforts to encourage location of new industry in the smaller cities and towns.

If past trends continue, the State's population patterns will persist in the uneven distribution and itensify the growth of urban areas. The efforts to change this trend are just beginning, and it will be some time before results can be evaluated. For the near future, it should be expected that the past trends will continue but at a reduced rate.

Urbanization — 32-11.00

The long time trend is toward greater and greater urbanization. Although the cold statistics would suggest that the State is still predominately agricultural, this is far from the actual situation. The agricultural population is rapidly declining and there is a steady increase in urbanization.

Table III-2 shows that the State has a rural population that exceeds urban population (55.3% to 44.7%), but urbanization is increasing at a steady and significant rate. It was 27.3% in 1940, increased to 33.7% in 1950 and was 39.5% in 1960. Present projections call for the urban and rural populations to reach equality by early in the 1980's.

Another important factor is the size of the population that is classified as "rural nonfarm". For 1970 this group represented nearly 45% of the total population and was larger than the urban class. This group, while living outside of the towns and cities, actually depends upon the urban centers for jobs and for a major portion of its shopping. As such, this group is more nearly oriented to the urban than the rural farm segment of the State.

Trends in Population Growth

Projections of outdoor recreation demand require an appreciation of current trends in population growth. The 1970 population was 5,082,059 as compared to 4,556,155 in 1960. Projections suggest a moderate growth rate with a population of 5,713,500 by 1980. For 1990 the projection is 6,431,000. In arriving at these figures many factors such as birth and death rates, migration and the structure of the population were studied. All of these factors influence the actual population figure. They are variable in that they are subject to unexpected changes and, thus make population projections a difficult task.

In the 1950s, the average annual growth rate for North Carolina was about 1.1% as compared to 1.5% for the Nation. This lower rate for North Carolina was greatly influenced by out-migration during the period. Since 1960, the net loss from out-migration has been reduced. The efforts to improve job opportunities is credited with affecting this reduction and there seems to be a growing confidence in the social and economic future of the State.

The population projections quoted above were developed by the Bureau of Economic Analysis of the U. S. Department of Commerce. They are revised at five-year intervals with the next revision due in 1977. The moderate growth rate--less than the national average--that was used appears to be too high. The data for present population is showing a rate of natural increase somewhat lower than the Bureau of Economic Analysis projections. However, during the last decade, it is estimated that there was a reduction in the out-migration and an increase for in-migration. The effect was a reduced net out-migration with expectations that there is now, or very soon will be, an even balance of migration.

Occupational Characteristics of the Labor Force

Another factor in the overall socioeconomic picture which affects the needs of outdoor recreation is the character of the labor force. Persons in certain occupations (e.g., farmers, labor in textile mills, etc.) have outdoor recreation tastes, interests and requirements that differ from other occupations (e.g., professional and technical personnel).

North Carolina is unusual in that it has a larger percentage of its labor force employed in both manufacturing and agriculture than the national average. It should be noted that in both manufacturing and agriculture the concentration is in labor intensive and rather low wage jobs. The total labor force is now 1,998,805 which is an increase of 24% over 1960. (See Table III-5) The change is significant considering the drastic reduction for employees in agriculture, forestry and fisheries.

TABLE III-5

(32-13.00)

NORTH CAROLINA LABOR FORCE

	1970	1960	% Change
Agriculture, Forestry, Fisheries	97,311	208,005	- 53
Construction	124,712	98,224	27
Manufacturing	670,891	509,206	32
Transportation, Communication, Public Utilities	104,345	74,586	40
Trade	333,098	257,257	29
Finance, Insurance, Real Estate	66,532	42,721	56
Business and Repair Service	39,044	27,538	42
Personal Services	99,478	122,486	- 19
Entertainment, Recreation	10,888	7,995	36
Professional Services	267,751	156,863	71
Government	67,957	47,746	42
Industry not reported	112,332	49,320	28
Mining	4,496	3,531	27
Total	1,998,805	1,605,478	24
Total Non-Agriculture	1,901,494	1,397,473	36

Source: 1970 Census of population, PC (1)-C General Social and Economic Characteristics.

The farm labor force is continuing to decline, following a long time trend. Between 1960 and 1970, the number of people employed in agriculture, forestry and fisheries was reduced by more than 50%. It is expected that the decline will continue but at a reduced rate. There are large numbers of small farms involved in producing labor intensive crops with low wage jobs. Tobacco is the most important crop and requires large numbers of hand laborers. Other important crops are corn, cotton, peanuts, and soybeans. There are sizable increases in livestock and livestock products; broilers, eggs and turkeys have high national rankings.

The nonagricultural labor force is large and is continuing to expand. Between 1960 and 1970 it increased by 36% and now is 1,901,494. The major category is manufacturing which now numbers 670,891. Other categories of importance include trade (333,098); professional services (267,751); construction (124,712); and transportation, communications and public utilities (104,345). These data represent significant increases over 1960. It is interesting to note that employees providing personal services were reduced during the period; the 1970 figure is 81% of the 1960 figure.

The major manufacturing industries are textiles, apparel, furniture, food processing and electrical machinery. For the State these interests represent a heavier emphasis than the national average. There is a rapid pace of industrial expansion which also involves construction at a greater-than-national-average rate.

The per cent of women in the labor force is continuing to increase. This has been the trend since at least the 1950s. In 1950 women constituted 29.7% of the labor force. This increased to about 34% in 1960 and now stands at 39.3%. They are extensively employed in the textile, clothing and food products industries as well as various clerical type positions. There is a decrease (from 12.2% to 5.2%) in women employed as private household workers. The participation rates in the labor force in age groups for both males and females shows only small changes over 1960.

Personal Income 32-14.00

The personal income for North Carolina is lower than national figures, however, there has been a long time trend for increased income at a greater rate than the nation as a whole. In addition, North Carolina is estimated to have a lower cost-of-living figure than the national average and much lower than the northeastern states. These items are important because there is a positive relationship between per capita income and participation in many recreation activities.

The data for per capita and family personal income provides an insight into the general level of prosperity which, in turn influences recreation activity. Per capita personal income for North Carolina in 1970 was $3,208 (see Table III-6). This is slightly more than double the figure for 1960 (plus 105%). This compares favorably with national averages which show an increase of 77% over 1960. To illustrate the rate of increase another way, the 1970 per capita income was about 80% of the national average while in 1960 it was 70%.

It was noted earlier that there was an increase in the number of women in the work force, and they are now 39% of the total. This fact, and the increase in the median family income, suggests a greater number of "working wives". For 1970 the median family income amounted to $7,774 for North Carolina; up from $3,956 in 1960.

There are significant differences in income among the several regions in the State. In broad terms, income is greater in the Piedmont with its greater concentrations of urban and industrial centers. The leading counties (Mecklenburg, Forsyth, Guilford, Durham and Wake) are all located in the Piedmont and include an urban city which serves as a center for trade, manufacturing and/or government. The Coastal Plains has higher income sections near military bases, a few larger towns and leading tobacco areas, but overall income is below the State average. The Mountain region has low income except around Asheville where tourists along with chemical and paper industries produce greater than average income.

TABLE III-6

(32-14.00)

PERSONAL INCOME SUMMARY -- 1970

	Family Income		
	Median	Mean	Per Capita Income
MOUNTAIN	6,901	7,563	2,884
Region A	6,210	6,924	2,547
B	7,374	8,354	3,185
C	7,594	8,204	2,895
D	5,881	6,769	2,480
PIEDMONT	8,144	9,256	3,557
Region E	8,477	9,454	3,502
F	9,080	10,238	3,695
G	8,850	10,040	3,771
H	6,769	7,672	2,811
J	8,494	9,856	3,382
K	6,407	7,536	2,501
COASTAL PLAIN	6,435	7,552	2,696
Region L	6,201	7,318	2,662
M	6,730	7,721	2,889
N	5,979	6,892	2,358
O	7,015	8,161	2,737
P	6,503	7,689	2,793
Q	5,992	7,302	2,607
R	6,287	7,404	2,497
STATE	7,774	8,388	3,208

Source: 1970 Census of population, PC (1)-C General Social and Economic Characteristics.

Education Levels

Participation in many outdoor recreation activities tends to increase as the education level rises. Also involved is the interrelationship of higher education with higher income. As indicated earlier, higher income often leads to more participation in outdoor recreation.

North Carolina has a low ranking among the states in education in terms of years of schooling completed. State policy is placing emphasis on education which is causing progress to be made. Considering persons 25 years of age or older, 38.5% had completed high school in 1970 compared to 32.3% in 1960 (see Table III-7). There has been a decrease, from 16.5% to 10%, of North Carolinians with less than five years of schooling. The median years of schooling has risen from 8.9 in 1960 to 10.6 in 1970. All of these values are less than the comparable national averages for 1960 and 1970. The progress made in North Carolina was not sufficient to reach the national averages. The educational level of whites is higher than other races and females have higher educational attainment than males.

There are differences in educational levels among the several regions in the State. By using the data in Table III-8, we find that Regions F and J in the Piedmont, Region B in the Mountains and Regions M, O, and P in the Coastal Plains have records equal to, or better than, the State as a whole. Other data suggest a concentration of college graduates in urban centers which offer greater potential for professional opportunities. While the differences are not great, the Piedmont has better education achievement than the Mountains or the Coastal Plains.

North Carolina has a number of highly rated institutions of higher learning and can claim a high ranking in the South as well as nationally. The several schools with wide recognition would include the University of North Carolina at Chapel Hill, North

TABLE III-7

(32-15.00)

EDUCATION LEVELS AND MEDIAN SCHOOL YEARS
1960 AND 1970 STATE AND NATION
(All persons 25 years of age or older)

	1960		1970	
	N.C.	U.S.	N.C.	U.S.
Less than five years of school	16.5%	8.4%	10.0%	4.6%
High School or more	32.3%	41.1%	38.5%	58.2%
Four years of college or more	6.3%	8.9%	8.5%	12.0%
Median School years	8.9	10.6	10.6	12.2

Source: 1970 Census of population, PC (1)-C General Social and Economic Characteristics.

TABLE III. 8

(32-15.00)

EDUCATION LEVELS OF ALL PERSON 25 YEARS OF AGE AND OLDER, BY REGIONS

	Total Population 25 yrs. over	With Less Than 5 Years Schooling		With High School or More		School Years Achieved			
						Males		Females	
		Number	%	Number	%	Number	Years Achieved	Number	Years Achieved
Mountains									
Region A	64,800	7,229	11.2	20,691	31.9	30,820	9.1	33,980	10.0
Region B	130,127	9,535	7.3	58,027	44.6	61,256	11.1	69,671	11.6
Region C	89,168	9,854	11.1	28,755	32.2	41,433	9.7	47,725	10.2
Region D	75,688	8,978	11.9	22,560	29.8	36,106	8.7	39,582	9.5
Sub-Total	359,783	35,596	9.9	130,033	36.1	169,625	9.9	190,958	10.5
Piedmont									
Region E	122,107	11,485	9.4	41,864	34.3	58,211	9.8	63,898	10.4
Region F	468,976	38,377	8.1	188,316	40.1	219,132	10.7	249,844	11.0
Region G	532,405	45,707	8.6	204,125	38.3	249,094	10.3	283,311	10.8
Region H	64,892	8,422	13.0	21,250	32.7	29,923	9.4	34,969	10.3
Region J	277,782	23,479	8.5	132,187	47.6	130,524	11.5	147,258	11.8
Region K	71,077	10,287	14.5	20,576	28.9	33,176	8.9	37,901	10.0
Sub-Total	1,537,239	137,717	9.0	608,318	39.6	720,060	10.5	817,181	11.0
Coastal Plains									
Region L	126,268	21,187	16.8	38,982	30.9	58,273	8.9	67,995	9.9
Region M	131,538	11,189	8.5	60,413	45.9	63,701	11.6	67,837	12.2
Region N	72,700	11,545	15.9	21,086	29.0	33,876	8.9	38,824	9.8
Region O	91,169	9,001	9.9	36,087	39.6	42,731	10.5	48,510	10.9
Region P	185,740	19,280	10.4	76,144	41.0	88,178	10.6	97,562	11.1
Region Q	90,037	12,888	14.3	30,377	33.7	41,575	9.1	48,462	10.3
Region R	51,789	6,128	16.8	16,519	31.9	24,350	9.2	27,448	10.3
Sub-Total	749,241	91,218	12.2	279,608	37.3	352,684	10.1	396,638	10.8
State Total	2,646,263	264,531	10.0	1,017,959	38.5	1,242,369	10.3	1,404,777	10.9

Source: 1970 Census of population, PC (1)-C General Social and Economic Characteristics

Blue Ridge Parkway as a recreation activity and a travel destination. Similar, but much less frequent, use is made of travel on other than primary highways. There can be real delight in using secondary roads and in traveling through small towns, agricultural areas and wooded hills.

The present road system in North Carolina is judged to be good to excellent. Since the elimination of the county highway departments, the State Highway Commission has direct control and responsibility for a road system in excess of 72,000 miles--the largest in the Nation. The State has an excellent system of secondary roads. There are five interstate highways (26, 40, 77, 85,and 95) that cross the State (see Figure III-3).

For resident recreation users in the State, the most desirable travel orientation would be east-west or even southeast-northwest. This is especially true of the large urban centers that are located in the central portion of the State. However, many of the State's outdoor recreation resources are less accessible to these large urban centers than are out-of-state recreation resources. In addition, many of the people in the coastal zone find themselves located to the east of most of the major North-South highway arteries. An increase and/or improvement in east-west routes would increase the accessibility of our coastal recreation resources.

Carolina State University at Raleigh, Duke University, Davidson College, Wake Forest University and others. In total there are 74 colleges or universities in the State. While 17% of persons 25 years or older have completed one or more years of college, there are 8.5% that have completed a college degree.

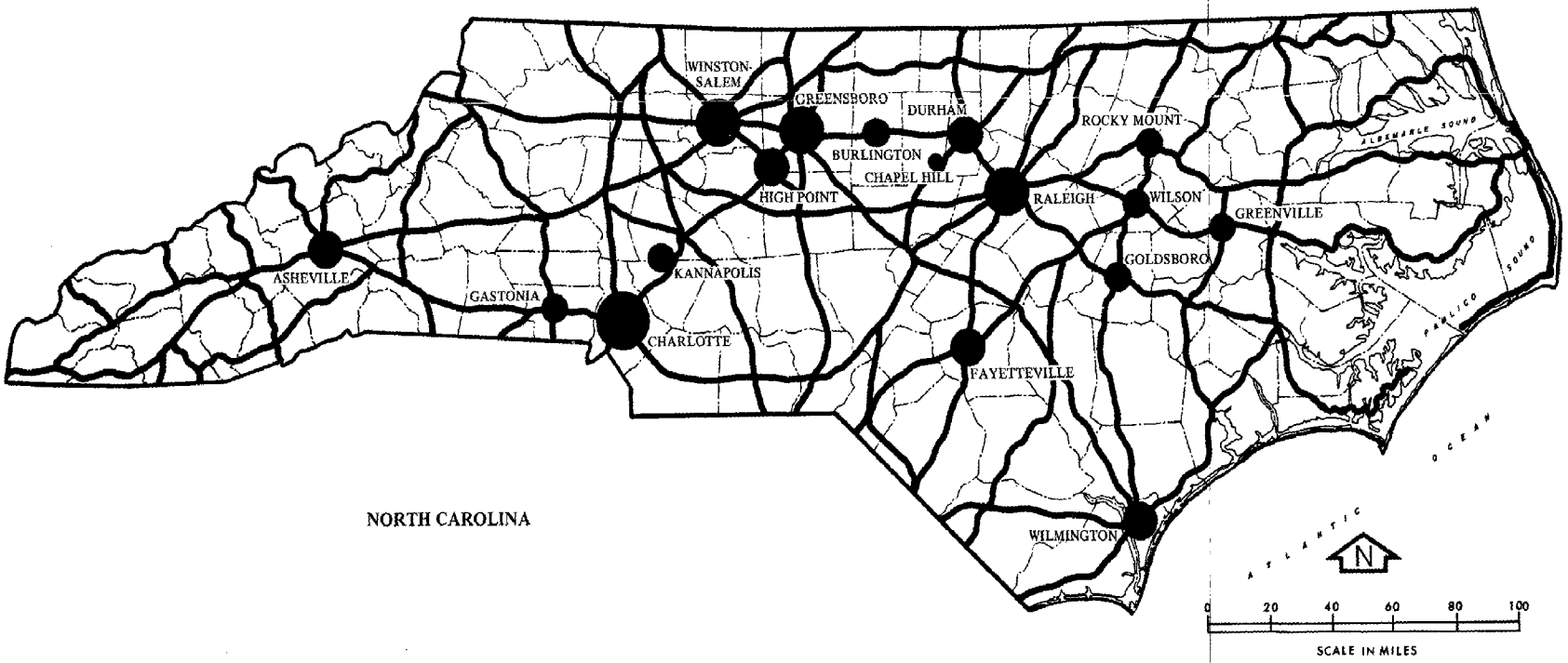
Another educational factor is the Community College and Technical Institute system in the State. At the present time, there are more than 50 such institutions offering beginning college, vocational, technical and adult education. They are located across the State so that nearly all of the population is within commuting distance.

The educational stress on recreation is illustrated by the fact that six universities in the State offer a degree program, one university and six community colleges and technical institutes have two-year programs and six additional colleges offer course work in recreation. Special mention should be made of the North Carolina School of The Arts at Winston-Salem. It is the Nation's first state-supported school for the performing arts.

Transportation Facilities 32-16.00

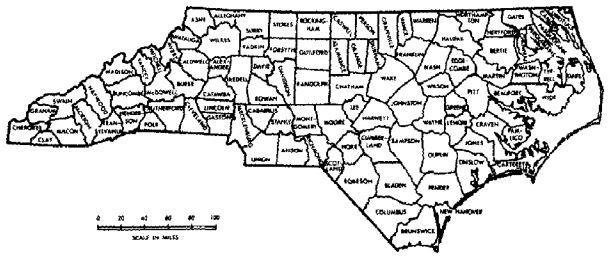
Travel is required in order to make use of the many varied outdoor recreation areas in North Carolina. The State has great length as compared to width. In addition, there is an uneven distribution of population. The concentrations of population in the central portion of the State make either the mountains or the seashore a trip of considerable significance in distance and/or time. The most common form of transportation is the automobile. All other forms of transportation represent only a small part of the total recreation travel.

Travel should be considered as more than just a means of getting to a recreation area. The trip itself can be a source of pleasure and recreation. There is very heavy use made of the



NORTH CAROLINA

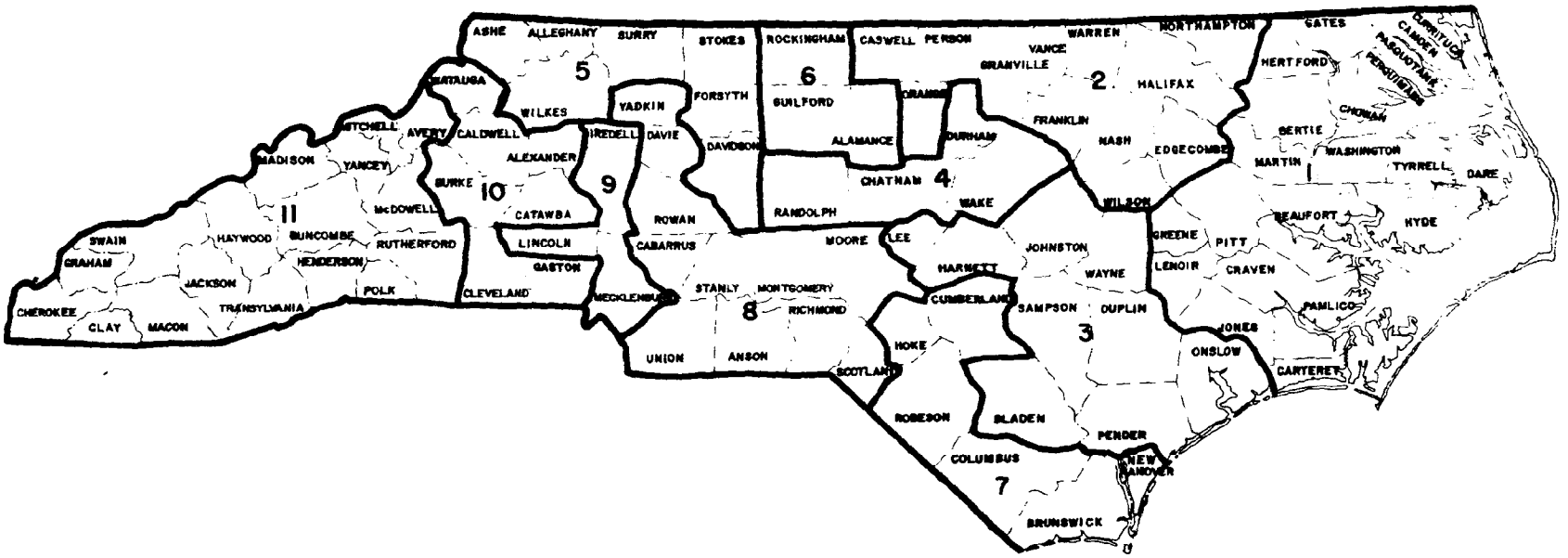
Figure III.3
(32-16.00)



NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
URBAN AREAS AND ARTERIAL HIGHWAY SYSTEM SHOWING:

FIGURE III. 4
(32-17.00)

STATE CONGRESSIONAL DISTRICTS — 1972



Political Boundaries 32-17.00

Political boundaries are among the many ways in which the State is delineated. Maps showing counties as subdivisions of the State are rather common. Following are three maps showing political boundaries, as follows:

Figure III. 4 State Congressional Districts, 1972

FIGURE III. 5 State Senatorial Districts, 1972

FIGURE III. 6 State Representative Districts, 1972

FIGURE III.5
(32-17.00)
STATE SENATORIAL DISTRICTS 1972

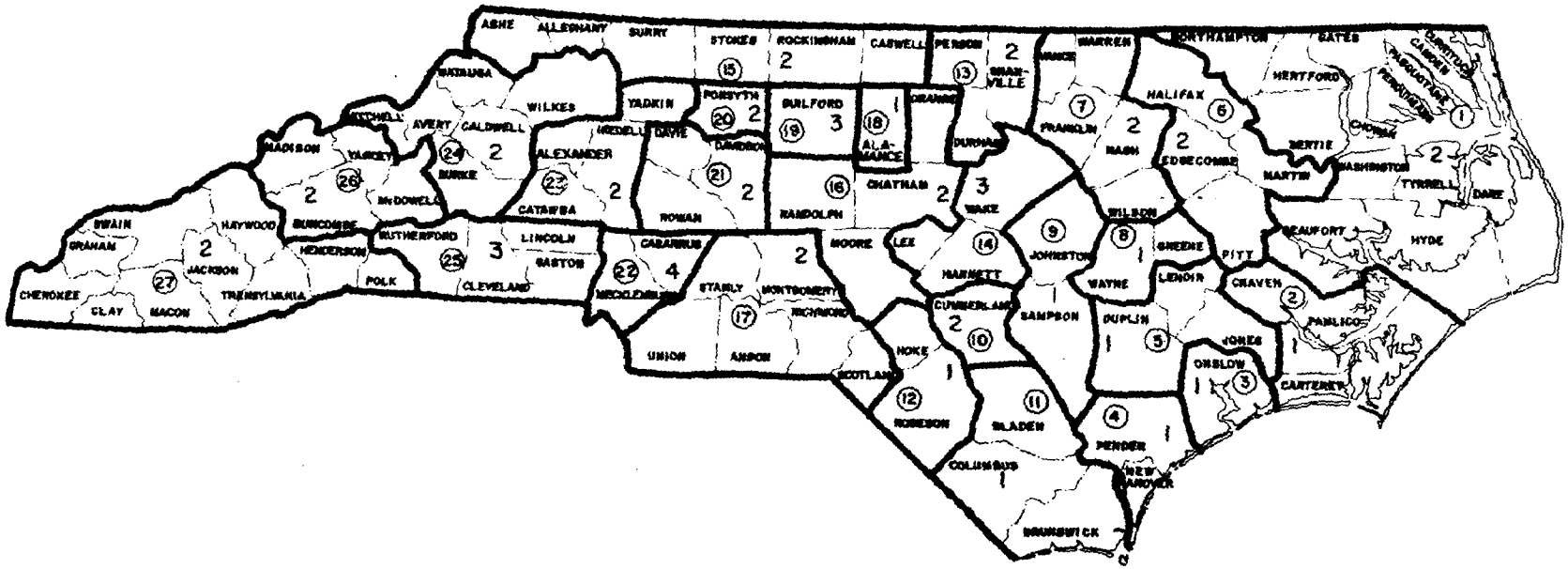
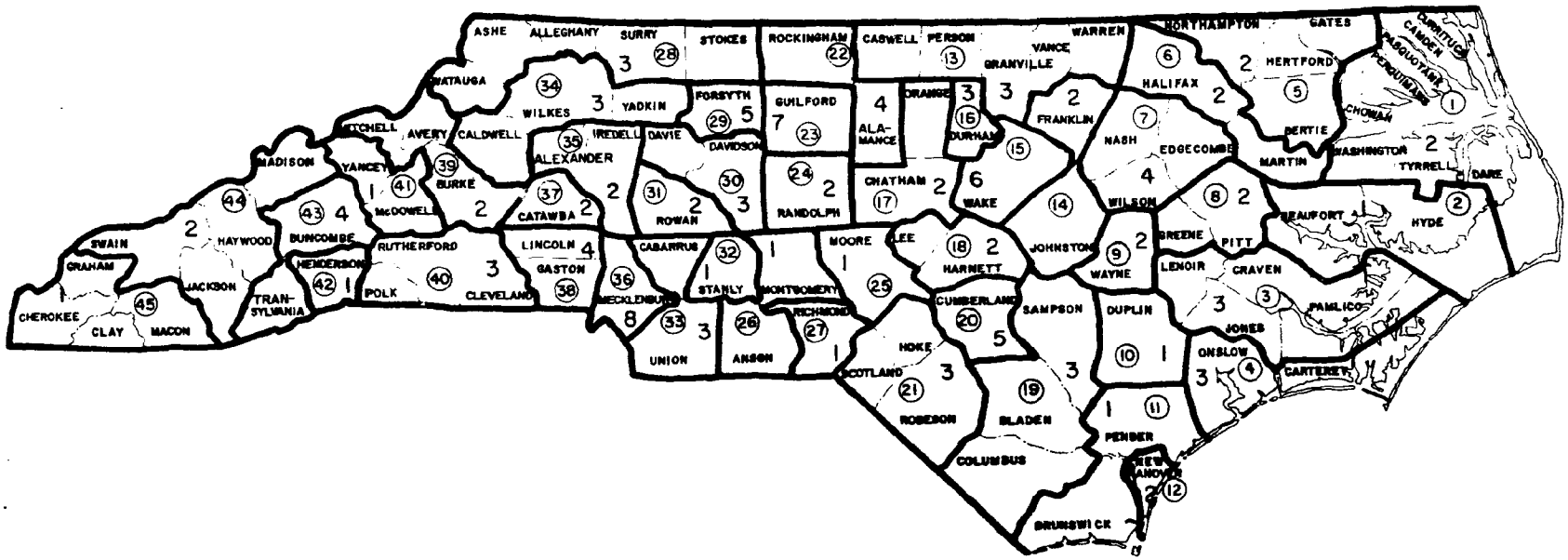


FIGURE III. 6
(32-17.00)

STATE REPRESENTATIVE DISTRICTS — 1972



Chapter IV	40-0.00 thru
Outdoor Recreation Demand	41-1.00

The Nature of Outdoor Recreation Demand 40-0.00

There are two basic ways of viewing the nature of outdoor recreation demand. One could be labeled as the popular view while the other could aptly be called the economic view.

Outdoor recreation demand, in the popular sense, is simply the amount of use, in terms of visits, visitors, or some other measure, that an existing outdoor recreation area or facility receives. For example, the total attendance at North Carolina State Parks for any given year, in the popular sense, measures the outdoor recreation demand for State Parks for that year.

On the other hand, in the economic sense, outdoor recreation demand is a schedule depicting the relationship between the quantity of recreation that will be consumed at a given price. For example, in the traditional economic viewpoint of supply and demand curves, the demand for outdoor recreation would decrease with an increase in price.

Due to difficulties in defining outdoor recreation as a consumable commodity with a given value and determining the price-for-value-gained relationship, the popular definition of outdoor recreation demand was used in developing this plan.

Definition of Terms 41-1.00

There are a few pertinent terms that are used repeatedly in the discussion of outdoor recreation demand in the North Carolina SCORP. It is advantageous to list them along with brief definitions at this point.

Outdoor Recreation Demand - As used in the text of the North Carolina SCORP, outdoor recreation demand is equated with use of existing areas and facilities.

Chapter IV	41-1.00 thru
Outdoor Recreation Demand	41-2.00

Latent Outdoor Recreation Demand - This is defined as the amount of outdoor recreation demand that is not expressed because areas to accommodate its expression are non-existent.

Visitor Day - A visitor day is a unit of measure for outdoor recreation demand that represents the use of an outdoor recreation area or facility by one person for any part or all of one day.

Activity Day/Participation Day - These are synonymous terms also used for measuring outdoor recreation demand meaning the use of an outdoor recreation area or facility for one outdoor recreation activity by one person for any part or all of one day.

Outdoor Recreation Activity - Any one of several outdoor recreation pursuits such as hunting, swimming, driving for pleasure, tennis, etc.

Principles of Outdoor Recreation Demand 41-2.00

In order to provide a sound footing upon which to base a discussion of outdoor recreation demand, there are some guiding principles that should be cited before proceeding. These principles have been supported in volume upon volume of research into the subject. The purpose for presenting them here is to make the reader aware of them since they are somewhat axiomatic and will not be belabored further in the text of this chapter.

1. The demand for outdoor recreation is increasing; this remains true no matter what method of measurement is used.

2. The majority of people will, when given opportunity and freedom of choice, devote a portion of their time and financial resources to the pursuit of one or more forms of recreation.

3. The expression of outdoor recreation demand is affected, although to different degrees, by various socio-economic factors.

Outdoor Recreation Demand Analysis - Emphasis and Recent History — 41-3.00

Since the release of the reports of the now-famous Outdoor Recreation Resources Review Commission (ORRRC) in the early sixties, there has been an increasing emphasis on the quantification of outdoor recreation demand generated by Americans. The ORRRC studies lent statistical support to the popular allegations that demand for outdoor recreation was increasing at an unprecedented pace. Due to the magnitude of their findings and the apparent lack of coordinated efforts toward meeting this increasing demand, the Bureau of Outdoor Recreation of the United States Department of the Interior was established to function as such a coordination agency at the federal level.

As with ORRRC, a top concern of the Bureau has been to better quantify the level of outdoor recreation demand. To this end, much emphasis was placed on the states to perform detailed demand analyses as part of their Statewide Comprehensive Outdoor Recreation Plans.

In addition, the Bureau of Outdoor Recreation updated the original ORRRC studies of participation in outdoor recreation activities by their own survey efforts in 1965 and 1970. These efforts evidence the continuing emphasis upon the quantification of demand.

Although recently there seems to be a waning of this intense interest in demand analyses, states are still encouraged to do further investigations of the phenomena.

The State of the Art of Demand Analysis in North Carolina 41-4.00

Prior to the current SCORP efforts in North Carolina, the majority of available information on outdoor recreation demand was in the form of attendance records kept by various governmental agencies that operate outdoor recreation areas. The mere existence of this type of information in the State did not guarantee its use for comprehensive statewide planning purposes; in fact, the basic method for quantifying demand used in the 1968 North Carolina SCORP was that of applying national participation rates, as derived through the BOR surveys, to the State population.

This was a justifiable approach since use figures were not available for all types of areas or activities. Even had such figures been available, the projection of use trends to establish future area and facility needs based solely on population increases would give a distorted view.

Another type of demand information that has been available in North Carolina for many years is in the form of an annual travel survey report issued by the Travel and Promotion Division of the Office of Industrial, Tourist and Community Resources of the Department of Natural and Economic Resources. This report, compiled by Lewis C. Copeland, Department of Statistics, College of Business Administration, the University of Tennessee and entitled North Carolina Travel Survey, An Economic Analysis, gives such information as tourist expenditures by various categories, tourist party composition, and point-of-origin by state.

Admittedly this type of report is of some value as a measure of outdoor recreation demand. However, it gives little information that is useful in quantifying the amount of recreation demand in terms of numbers of persons participating in specific activities or visiting specific types of areas.

With these types of demand information already available in North Carolina, the SCORP planning program turned its focus to a different technique for measuring outdoor recreation demand.

Household Survey of North Carolina Outdoor Recreation Demand 42-0.00

One of the major elements of the current SCORP planning program was an analysis of outdoor recreation demand generated by North Carolinians. Based upon considerations for obtaining a representative estimate of demand, it was decided to conduct a household survey of a sample of North Carolina residents. The household survey technique was chosen over techniques involving mail-out questionnaires and telephone interviews due to the biases inherent in the latter two methods.

Early in the program a pilot household survey was conducted by the Research Triangle Institute along with pilot mail-out and telephone surveys. The results of this pilot indicated the desirability of the household survey method and also dictated several changes in the questionnaire itself. (At this stage, for administrative purposes, it was decided that the full scale household survey would be handled "in-house" through the State Planning Division--now the Office of State Planning.)

The final form of the questionnaire was designed to gain data on five main areas of concern for SCORP planning purposes. They were: information to identify the geographic location of the household, socio-economic identifiers relative to the household members, measures of the amount of participation of members of the household in outdoor recreation activities, measures of the amount of visitation at specific categories of outdoor recreation areas and facilities through trips, and information on the attitudes of the household members toward outdoor recreation.

The survey was conducted during the months of February, March and April of 1972 by experienced interviewers commonly used by Harris, Gallop, and other professional pollsters.

The sample selected was a stratified random sample of 735 households at 80 sample points across the State. The average size of a household was 3.3 persons.

The results of the survey were coded and analyzed during the summer and fall of 1972. Although many specific types of analyses and cross tabulations were possible with the data gathered, only those data most pertinent to giving a broad picture of outdoor recreation demand in North Carolina are represented in this document. The data presented herein are sufficent for statewide comprehensive outdoor recreation planning purposes in that they point out areas of greatest demand for outdoor recreation opportunities.

The amount of that demand is also considered in later chapters for purposes of establishing standards for determining needs for outdoor recreation areas and facilities.

The remainder of this chapter is devoted to presenting the basic findings of the household survey of demand and discussing some major factors affecting this demand.

A considerable amount of the information and data presented in this chapter is in terms of specific rates per household or portions of certain groups of households. To facilitate application of these rates to the various multi-county planning regions, a list of the number of households per region is included as Table IV. 1.

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TABLE IV. 1.

(42-0.00)

DISTRIBUTION OF HOUSEHOLDS, 1971

Regions	Urban	Rural	Total
Mountains			
A	3,812	31,837	35,649
B	31,733	40,860	72,593
C	15,615	34,470	50,085
D	3,080	39,208	42,288
Sub-Total	54,240	146,375	200,615
Piedmont			
E	23,116	45,945	69,061
F	164,234	104,789	269,023
G	166,375	138,273	304,648
H	7,842	28,761	36,603
J	99,662	66,206	165,868
K	9,777	27,523	37,300
L	29,756	40,710	70,466
Sub-Total	500,762	452,207	952,969
Coastal Plains			
M	44,113	35,999	80,112
N	10,632	30,540	41,172
O	20,274	32,309	52,583
P	43,446	67,678	111,124
Q	18,384	33,268	51,652
R	7,515	21,440	28,955
Sub-Total	144,364	221,234	365,598
STATE TOTAL	699,366	819,816	1,519,182

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TABLE IV. 2

(42-1.00)

OUTDOOR RECREATION ACTIVITY DAYS PARTICIPATION
BY NORTH CAROLINA RESIDENTS IN 1971

Rank	Activity	Adult Days	Total Days
1	Pleasure driving	27,947,000	47,509,900
2	Sightseeing	16,373,000	27,834,100
3	Picnicking	9,024,000	15,340,800
4	Playing outdoor games	8,073,000	13,724,100
5	Viewing outdoor games	8,028,000	13,647,600
6	Swimming--other than pool	7,017,000	11,928,900
7	Nature walk	6,428,000	10,927,600
8	Swimming--pool	6,127,000	10,415,900
9	Fishing	5,795,000	9,851,500
10	Bird watching	5,131,000	8,722,700
11	Golf	4,376,000	7,439,200
12	Hunting	3,275,000	5,567,500
13	Visiting historic sites	2,912,000	4,950,400
14	Camping	2,837,000	4,822,900
15	Power boating	2,777,000	4,720,900
16	Biking	2,505,000	4,258,500
17	Tennis	1,901,000	3,231,700
18	Water skiing	1,524,000	2,590,800
19	Horseback riding	1,328,000	2,257,600
20	Mountain climbing	1,147,000	1,949,900
21	Target shooting	1,132,000	1,924,400
22	Visiting zoos	1,026,000	1,744,200
23	Viewing cultural exhibits	951,000	1,616,700
24	Attending outdoor concerts and dramas	785,000	1,334,500
25	Rock hunting	770,000	1,309,000
26	Ice skating	573,000	947,100
27	Canoeing--exercise	558,000	948,600
28	Wildlife photography	513,000	872,100
29	Sailing	483,000	821,100
30	Archery	483,000	821,100
31	Showing horses--ring	453,000	770,100
32	Hiking--pack	423,000	719,100
33	Snow skiing	392,000	666,400
34	Trap shooting	241,000	409,700
35	Canoeing--view scenery	226,000	384,200
	TOTAL	133,531,000	227,007,800

(Total does not correspond with total of individual activities due to rounding)

TABLE IV. 3

(42-1.00)

ADULT OUTDOOR RECREATION ACTIVITY DAY PARTICIPATION RATES OF NORTH CAROLINA RESIDENTS, 1971

Rank	Activity	Days per Household per year
1	Pleasure driving	18.52
2	Sightseeing	10.85
3	Picnicking	5.98
4	Playing outdoor games	5.35
5	Viewing outdoor games	5.32
6	Swimming--other than pool	4.65
7	Nature walk	4.26
8	Swimming--pool	4.06
9	Fishing	3.84
10	Bird watching	3.40
11	Golf	2.90
12	Hunting	2.17
13	Visiting historic sites	1.93
14	Camping	1.88
15	Power boating	1.84
16	Biking	1.66
17	Tennis	1.26
18	Water skiing	1.01
19	Horseback riding	.88
20	Mountain climbing	.76
21	Target shooting	.75
22	Visiting zoos	.68
23	Viewing cultural exhibits	.63
24	Attending outdoor concerts and dramas	.52
25	Rock hunting	.51
26	Ice skating	.38
27	Canoeing--exercise	.37
28	Wildlife photography	.34
29	Sailing	.32
30	Archery	.32
31	Showing horses--ring	.30
32	Hiking--pack	.28
33	Snow skiing	.26
34	Trap shooting	.16
35	Canoeing--view scenery	.15
	All listed activities	88.49

TABLE IV. 4

(42-3.00)

ACTIVITIES RANKED BY % OF HOUSEHOLDS WITH SOME PARTICIPATION, 1971

Rank	Activity	% Households
1	Pleasure driving	60.4
2	Sightseeing	55.3
3	Picnicking	49.2
4	Fishing	46.3
5	Viewing outdoor games	33.7
6	Swimming--other than pool	33.7
7	Swimming--pool	30.2
8	Nature walking	28.8
9	Visiting historic sites	28.4
10	Hunting	25.8
11	Playing outdoor games	24.8
12	Camping	19.8
13	Visiting a zoo	18.5
14	Golf	16.3
15	Power boating	14.0
16	Cultural exhibits	12.7
17	Biking	11.8
18	Bird watching	11.0
19	Tennis	11.0
20	Attending outdoor concerts and dramas	10.7
21	Target shooting	9.3
22	Water skiing	8.4
23	Mountain climbing	8.2
24	Horseback riding	7.5
25	Ice skating	4.9
26	Rock hunting	4.8
27	Snow skiing	3.7
28	Hiking--pack	3.4
29	Archery	3.2
30	Canoeing--exercise	2.5
31	Wildlife photography	2.5
32	Trap shooting	2.5
33	Sailing	2.3
34	Showing horses	2.1
35	Canoeing--view scenery	1.5

("Some participation" is defined as participation by at least one person in the household at least once during the year.)

Sightseeing

The viewing of historical, scenic, or other specific attractions. An important qualification is that sightseeing must involve the prior intention on the part of the participant of viewing the attraction.

Picnicking

An outdoor activity where the primary purpose is the preparation or eating of a meal out of doors.

Playing outdoor games

Any games and sports where there is competition against other persons (such as tennis, softball, badminton, etc.) or against the clock or a record (speedboat racing, auto rallies, etc.)

Viewing outdoor games

An activity involving merely the viewing or watching of outdoor games but excluding active participation.

Swimming - other than pool

Swimming in a lake, river, or ocean and including playing in the surf, surfing, skin diving, scuba diving and sunbathing at any of the above places.

Nature walking

Walks for the specific purpose of observing plants, birds, or animals and often including the collection of specimens.

Swimming - pool

Swimming in a man-made pool (with filtration system) including diving from spring boards and sunbathing on the pool deck or adjacent area.

Fishing

The act of attempting to catch or catching fish for noncommercial purposes.

Bird watching

The purposeful observation of birds in their natural surroundings often with binoculars or other special equipment.

Golf

An outdoor game played on a large course with a small resilient ball and a set of clubs, the object being to direct the ball into a series of variously distributed holes in as few strokes as possible.

Hunting

The search for, or stalking of, animals in order to kill with bullets, arrows, etc., but excluding commercial hunting and the trapping of animals.

Visiting historic sites

Visiting areas whose particular attraction lies in their historical significance and the provision of interpretive devices, facilities, and sometimes professional staff.

Camping

Living out of doors, using sleeping and cooking equipment and shelter ranging from none through tent, trailer, or lean-to. It does not include formal camps for youth or other so-called group camps operated on an organized basis.

Power boating

Recreational use of boats having as the primary means of propulsion a fuel-powered engine, either inboard or outboard.

Biking

Riding of a bicycle for pleasure or exercise. This includes the use of a bicycle as a means of transportation from home to work or school and back again.

Tennis

A game played by striking a ball back and over a net that divides the playing surface called a court.

Water skiing

Any of a variety of activities in which a person is towed behind a powered boat on water skis, aquaplanes, etc.

Horseback riding

Any riding of horses for purely recreational purposes, excluding riding horses as part of one's job.

Mountain climbing

The climbing of mountains or rocks with the use of gear such as rope, pitons, crampons, etc.

Target shooting

Shooting of a rifled weapon at an inanimate object such as a paper bull's eye for the purpose of striking the target with the fired bullet as close to the center as possible.

Visiting a zoo

Visiting an area where animals are retained for the purposes of providing humans the opportunity to see them.

Viewing cultural exhibits

Attending exhibitions of items of cultural interest and importance such as art shows.

Attending outdoor concerts

Attending events at which exhibitions of musical or dramatic activity are performed.

Rock hunting

Seeking and collecting specimens of minerals for the pleasure and enjoyment derived therefrom, excluding commercial mining.

Ice skating

Any recreational use of ice skates which is carried on in a noncompetitive manner.

Canoeing for exercise

The recreational use of a narrow light boat, canoe, for the purpose of enhancing one's physical fitness.

Wildlife photography

The taking of photographs of birds and animals in their natural surroundings.

Sailing

The recreational use of any vessel primarily intended to be propelled by wind and sail including sailboats with auxiliary engines.

Archery

The recreational use of bow and arrow excluding hunting or fishing.

Showing horses - rings and arenas

Organized exhibition of horses and horsemanship skills usually taking place in a ring or arena designed for that and similar purposes.

Hiking - pack

Walking of a substantial nature in which a pack containing provisions and/or shelter is carried by at least one member of the party.

Snow skiing

The recreational use of snow skis, usually at an area or facility designed to accommodate such use and commonly equipped with snowmaking devices.

Trap shooting

The recreational shooting of clay pigeons hurled into the air from a trap.

Canoeing - viewing scenery

A specialized form of recreational sightseeing which employs a canoe as the primary means of transportation and which has as its objective the viewing of natural scenery adjacent to the conveying body of water.

Participation Characteristics of North Carolina Household Residents by Activity, 1971 — 42-3.00

The general findings of the household survey questions regarding activities are presented below by type of activity. These narrative commentaries on each activity condense several types of tabular data produced in the analysis of the survey and are intended to give a general overview of significant findings related to each activity.

A tabular accounting of the data discussed here can be found in Table IV. 3, Household Participation Rates by Activity; Table IV. 4, Portions of Households with Some Activity Participation; Table IV. 5, Adult Participation Frequency by Activity; Table IV. 34, Per Cent of Households Participating By Income, 1971.

As with the preceding section, the activities are presented in order of their popularity in North Carolina; the degree of popularity being determined by the total number of adult activity days attributed to each activity, (Table IV. 2).

Another important note to make at the outset of this section is in regard to the distinctions made between male and female participation. This distinction was made solely upon differences in participation by male heads of households and their spouses. Therefore, all reference to sex differentials in the following discussion of activities must be viewed in this context.

Pleasure Driving - #1

In terms of number of North Carolina households that participated in a particular activity, this was the most common recreation activity among those listed on the survey questionnaire. Over 60% of the households in the State participated in this activity at least once during 1971 with the median frequency of participation exceeding fifteen occasions annually. There was a noticeable difference in the amount of households participating when compared to total household income. Approximately 40% of households whose income was less than $4,000 annually participated in this activity while almost 67% of households in the income categories of $4,000 - $7,500, $7,500 - $10,000, and over $10,000 participated, (i.e., the percentage of households in each of the latter three categories of income was about 67%). Both men and women participate in approximately equal numbers. On a statewide basis, participation in this activity averages 18.52 adult activity days per household per year.

Sightseeing - #2

Approximately 55% of North Carolina households participated in this activity; that is, at least one person in the household participated at least once during the year. This fact makes sightseeing the second most popular activity of North Carolina household residents based upon percentage of households participating. Female participation is somewhat greater than male. About 51% of wives participated as compared to about 44% of male household heads. The median frequency of adult participation for all households was in excess of six times annually. Differences in participation by

income among households were evidenced in the analysis of this activity. For households with total income in the range $4,000 or less, the percentage of households participating was about 38% whereas the same measure for the income categories of $4,000 to $7,500, $7,500 to $10,000, and over $10,000 were 61%, 59%, and 64% respectively. On a statewide basis, the rate of participation in this activity per household was 10.85 adult activity days annually.

Picnicking - #3

Picnicking was the third most popular activity listed on the survey form with about 49% of North Carolina households participating. Frequency of participation in this activity tended to form a mode of two occasions annually with similar patterns of frequency for both males and females. In terms of gross numbers of persons participating in this activity, however, a slightly greater percentage of females participated than did males. An interesting pattern of participation by income category was noted with picnicking. A significantly lower percentage of households (24%) in the income group $4,000 or less and a significantly larger percentage (65%) in the income group $10,000 and over participated than did those households in the income categories $4,000 to $7,500, and $7,500 to $10,000, (48% and 51% respectively). In terms of adult activity days per household per year, this activity had a rate of 5.98.

Playing Outdoor Games - #4

Playing outdoor games was the eleventh rated activity in terms of percentage of households participating (25%) but in volume of activity days generated in this activity, it was fourth. It is quite understandable, then, that the median frequency of participation was on the order of eleven times annually. Somewhat more household heads (males) participated in this broad category of recreation activity than did females with respective proportions of about 19% and 15%. However, it was also noted that about 15% of the females

participated an average of ten times per year. By income category, this activity seems to be most popular with residents of households whose total annual income exceeds $10,000 as about 34% of the households in this category participated. The percentage of households participating from other income categories were: $4,000 or less - 12%; $4,000 to $7,500 - 29%, $7,500 to $10,000 - 23%. Adult participation in this activity averaged 5.35 days annually per household.

Viewing Outdoor Games - #5

This activity was about equal to playing outdoor games in terms of total activity days devoted to each by residents of North Carolina households. However, far more households were involved with viewing outdoor games (34%) than were involved with playing outdoor games (25%). The two activities are similar in at least one other respect--that is, they both had more than 50% of their participants engaging in the activity eleven or more times per year. When comparing frequency of participation between the two activities, the distinction lies in the fact that fully 20% of the "participants" view outdoor games three times or less per year while only 11% of those who play outdoor games did so three times or less a year. Therefore, playing outdoor games has considerably more involvement per participant. The proportion of households participating in this activity varied noticeably with amount of household income. In the categories of $4,000 or less, $4,000 to $7,500, $7,500 to $10,000, and over $10,000 the proportions were 18%, 36%, 31% and 46% respectively; generally indicating that participation in this activity was closely related to income. There also was a positive correlation between both the amount and frequency of participation by males and females. In terms of household adult activity days generated in this activity, the average participation amounted to 5.32 days annually.

Swimming - Other Than Pool - #6

Swimming in places other than man-made pools was found to be slightly more popular than swimming in pools; both in terms of total activity days (7,017,000 to 6,127,000 respectively) and percentage of households with some participation (34% to 30% respectively).

Male and female participation was generally comparable with 50% of the participants swimming five times or less per year. Again there was considerable variance in the percentage of households participating when the survey results were stratified by annual income category. Only 9% of those households in the category of $4,000 or less participated while almost 53% of those households in the $10,000 and over category participated. The two income categories between these two extremes ($4,000 to $7,500 and $7,500 to $10,000) had a proportional household participation of 33% and 38% respectively. In terms of adult activity days per household, the rate of this activity was computed to be 4.65 annually.

Nature Walking - #7

About 29% of North Carolina households participated in this activity creating a volume of activity days that places it in the top ten activities. Male and female participation patterns, both in terms of frequency and amount, were similar with female participation being only slightly less in both cases. The median frequency of participation was about seven times annually. Statewide participation in this activity was found to average 4.26 adult activity days per household per year. There was much less variance in the percentage of households participating (i.e., as compared to viewing outdoor games) by income level with the proportions being 24%, 32%, 28%, and 36% for the respective categories of $4,000 or less, $4,000 to $7,500, $7,500 to $10,000, and over $10,000.

Swimming - Pool - #8

Swimming in pools was the eighth rated activity in terms of total number of activity days and the seventh rated activity in terms of percentage of households with some participation. Participation was fairly evenly distributed between males and females. However, about 21% of the wives of household heads participated while 19% of the household heads participated. One very interesting result concerning the analysis of this activity was the finding that,

for both males and females, almost 10% of the participants engaged in the activity at a frequency level of fifty or more times a year. The median frequency of participation for household heads was about six times annually while for wives of household heads the figure was about eight times a year. The annual adult activity days per household averaged 4.06 for the State as a whole. As could be expected of an activity such as this--requiring rather costly and specialized facilities--there was a marked correlation between the degree of participation and the income level of the responding household. For the income categories of $4,000 or less, $4,000 to $7,500, $7,500 to $10,000, and over $10,000, the percentage of households participating were found to be about 6%, 23%, 31%, and 56% respectively.

Fishing - #9

Fishing was among the ten most popular activities in terms of total activity days and was the fourth top-rated activity in terms of percentage of households that have some degree of participation by at least one member. This fact suggests that a relatively large percentage of fishermen engaged in fishing only one or two times a year. Survey results substantiate such a conclusion in that about 20% of those participating in fishing activities did so not more than twice a year. In terms of frequency of participation, there is yet another very distinctive group of fishermen. This group is the 40% of fishermen that went fishing twelve or more times a year. The median number of times household heads went fishing was computed to be six per year (the same as for hunting). A noticeable difference was found in this activity between the number of household heads and the number of wives of heads that fished. It was found that about 40% of the household heads participated and that about 18% of the wives participated. The analysis of this activity by income of the responding households revealed that it was the third most popular activity among those households with total annual incomes of less than $4,000

and that almost 29% of these households had some participation in fishing. The proportion of households participating from the other three income categories ($4,000 to $7,500, $7,500 to $10,000, and over $10,000) were 52%, 52%, and 54% respectively--a remarkably low variance among these categories. On a statewide basis, the average amount of fishing was found to be 3.84 adult activity days per household per year.

Bird Watching - #10

This activity represents the tenth most popular activity in terms of total number of activity days devoted to its pursuit, (bird watchers unite!). The number of days spent watching birds for recreation purposes is significant when viewed in the light of the fact that 11% of North Carolina households had some participation in this activity. As would be expected, then, the frequency of participation per participant was rather high with over one half of the male bird watchers doing so on twenty-five or more occasions a year and over one third of the female bird watchers watching in excess of one-hundred occasions annually. Nevertheless, the statewide average rate of participation per household in the activity amounted to 3.40 adult activity days per year. By income, about 5% of the households in the $4,000 or less bracket watched birds on a recreational basis; about 13% of the households in the bracket $4,000 to $7,500 participated; about 14% of the households in the bracket $7,500 to $10,000 participated; and about 12% of the households in the bracket over $10,000 participated.

Golf - #11

This activity was played to some extent by almost one-sixth (16%) of the households in North Carolina. Almost 15% of the households indicated that the household head participated while only about 4% of the wives participated. The median frequency of participatio. for adult males was 13.4 while for adult females it was 11.5. A very positive correlation between proportion of households participating and income was noticed. The proportion of participating

households in the income category of $10,000 and over was almost three times as much as the next highest income category ($4,000 or less). The average number of adult activity days per household per year for the State was 2.90.

Hunting - #12

This activity was ranked number twelve in terms of total activity days of participation and number ten in terms of percentage of households participating (26%). This was a markedly male activity with about 24% of the household heads indicating participation while only 2% of the wives participated. For males, the median frequency of participation was six times annually with nearly five per cent of household heads reporting a frequency level in excess of fifty times a year. The wives reported hunting a median of three times a year. On a statewide basis, the average level of participation in this activity was 2.17 adult activity days per household per year. Participation in hunting was only slightly related to income in the top three categories of income ($4,000 to $7,500, $7,500 to $10,000, and over $10,000) with participation rates in terms of per cent of households participating being 30%, 32% and 31% respectively. For the lowest income class of $4,000 or less per household annually, the percentage of households with some participation in hunting was 13%, or less than half of the proportion for each of the upper three categories.

Visiting Historic Sites - #13

Well over one-fourth (28%) of North Carolina households had some participation in this activity, ranking it number nine in terms of numbers of households involved to some degree. By total activity days of participation, however, it is ranked thirteenth. This activity, while being widespread in its appeal to households, had a rather low median frequency of participation--two times or less per year. Female participation (27%) was somewhat higher than male participation (24%). The amount of participation in this

activity is positively correlated with income; about 9% of the households in the category of $4,000 or less participated, about 29% of the households in the category of $4,000 or $7,500 participated, about 32% of the households in the income category of $7,500 to $10,000 participated, and about 43% of the households in the category of $10,000 and over participated. Average statewide participation was 1.93 adult activity days per household per year.

Camping - #14

Almost 20% of the households in North Carolina participated in camping to some degree; generating 2,837,000 adult activity days. Males and females camped in about equal numbers and with similar levels of frequency. The survey results indicate that more than half (54.4%) of North Carolina campers camped three or fewer times a year. The average amount of participation was 1.88 adult activity days per household per year when computed on a statewide basis. The amount of camping done by households of different incomes varied noticeably. The proportion of households with an annual income of less than $4,000 that camped was 6%, or about one-third of the proportion of households in the income groups of $4,000 to $7,500 (19%) and $7,500 to $10,000 (18%) that camped. Also, the proportion of this lowest income group that camped was about one-fifth the proportion of households in the highest income class (over $10,000) that camped (33%).

Power Boating - #15

In terms of total adult activity days of participation per year, this activity is ranked number fifteen--coincidently, it is also ranked fifteenth in terms of percentage of households with some degree of participation (14%). Participation by males is about equal to that of females with the median frequency of participation per year being about five times. The variance in proportional participation from households of different incomes is almost identical

to that of camping, (see above). The average amount of participation in power boating across the State by adult residents of households is about 1.84 adult activity days per household per year.

Biking - #16

Biking is the seventeenth ranked activity in terms of numbers of households with some participation (12%). In total volume of adult activity days devoted to the pursuit of various activities, this activity is ranked sixteenth. Participation by females was more common than by males; the percentages of each being 10% and 7% respectively. The frequency of participation in this activity for both sexes had a median of about six occasions per year. Participation in biking is heavily related to the total annual income of the household. For households with less than $4,000 per year income, less than one per cent used bicycles. For households in the categories of $4,000 to $7,500 and $7,500 to $10,000 the proportions were 11% and 9% respectively. A full 24% of households in the highest income bracket (over $10,000) participated in this activity. Statewide, the total amount of participation amounted to 1.66 adult activity days per household per year.

Tennis - #17

Tennis players can be found in about 11% of North Carolina households. The volume of total adult activity days ranks this activity number seventeen among the thirty-five activities listed on the household recreation demand questionnaire. By percentage of households participating, tennis is nineteenth in popularity among North Carolinians. Participation by males and females was similar with about 7% of the State's men and about 6% of the State's women playing tennis to some degree. The median frequency of play for this activity ranged between three and five times a year. The average adult activity days per household was 1.26 per year. The survey results also indicate that participation in

tennis was noticeable constrained by total household income. Three per cent of the households in the income bracket of less than $4,000 participated. Eight per cent of the households in the income bracket $4,000 to $7,500 participated. Eleven per cent of the households in the income bracket $7,500 to $10,000 participated. Twenty-one per cent of the households in the highest income bracket of over $10,000 annually participated.

Water Skiing - #18

According to the household recreation demand survey results, slightly more than 8% of North Carolina households had some degree of participation in water skiing, making it the twenty-second activity (ranked accordingly) among the thirty-four other activities listed on the questionnaire. In terms of total adult activity days devoted to its pursuit, water skiing is rated as the eighteenth most popular activity. Participation by males (7%) was somewhat higher than that of females (5%) in terms of percentages of both groups who water ski. The median frequency of participation for both sexes was about five times annually with 25% of the participants water skiing two times or less and 36% water skiing eleven or more times annually. The total amount of participation for the State averaged 1.01 adult activity days per household per year. As with other activities requiring specialized equipment that is fairly expensive, water skiing participation depends a great deal upon the amount of total annual household income. Less than 1% of the households in the income class of $4,000 or less indicated that they water ski. For the middle two classes of income-$4,000 to $7,500 and $7,500 to $10,000 the proportion of households participating was 7% and 8% respectively. The proportion of households with total annual incomes in excess of $10,000 that participated was 17%.

Horseback Riding - #19

Over 7% of North Carolina households participated in this activity to some degree. This fact makes it the twenty-fourth most popular activity among the State's households while in terms of

total annual adult activity days, it ranks nineteenth. Participation by males and females was about equal--almost 5% from each sex. The modal frequency of participation was only once per year. However, almost 25% participated more than twenty-one times annually. The percentage of households participating by income class was distributed as follows: $4,000 or less - 2%; $4,000 to $7,500 - 9%; $7,500 to $10,000 - 7%; over $10,000 - 12%. The statewide average participation was 0.88 adult activity days per household per year.

Mountain Climbing - #20

This activity was part of the recreation fare of 8% of the households in North Carolina making it the twenty-third most popular activity among households. The volume of participation (adult activity days) was such that it was rated number twenty according to this type of criteria. Male and female rates of participation were approximately equal at 6.5%. The modal frequency of participartion was only once per year. However, there was a sizable group (18%) that participated six or more times a year. Among the top three income groups, the popularity of this activity was almost equal with 9% of the households in the $4,000 to $7,500 category, 8% of the households in the $7,500 to $10,000 category, and 11% of the households in the $10,000 and over category participating. In the lowest income group ($4,000 or less) only 4% of the households had some degree of participation. The statewide average volume of participation was 0.76 adult activity days per household per year.

Target Shooting - #21

More than 9% of the households in the State had some participation in target shooting according to the results of the survey. This activity was almost exclusively male-oriented with about 7% of them participating as compared to only 1% of the females. The median frequency of participation amounted to about four occasions annually. Participation by income class was about equal for the

three upper categories at approximately 12%. For the lowest income category, however, the proportion of households participating was only one-fourth of that figure--3%. The average number of adult activity days per household per year was 0.75 for the State as a whole.

Visiting a Zoo - #22

In terms of number of households participating in a particular activity, this activity ranked number thirteen among the thirty-five activities on the survey questionnaire with fully 18% of North Carolina households participating to some degree. According to total number of adult activity days in this activity, it ranked twenty-second among the other activities. The frequency of participation pattern for this activity was such that about 80% of the participants engaged in the activity on two or fewer occasions per year. It can thus be reasoned that this activity is a sought-after form of recreation among North Carolina households but that one or two visits satisfy the desire to participate on an annual basis. This was one of the more popular activities of households in the lowest income group in that almost 10% of these households participated. Almost 20% of the households in the income category $4,000 to $7,500 participated. About 19% of the households in the group $7,500 to $10,000 participated. Almost 26% of the households in the over $10,000 income group visited zoos. This activity draws slightly more female participants than males; 17% as compared to 14% respectively. Average adult activity days was 0.68 per household per year.

Viewing Cultural Exhibits - #23

About one-eighth (12.7%) of North Carolina households engaged in this activity making it the sixteenth most popular activity in those terms while only the twenty-third most popular activity in

terms of total adult activity days. Female participation was somewhat greater than male with 12% and 9% participating respectively. This activity was more popular among the two upper income categories with 20% of households making $7,500 to $10,000 annually and 24% of the households making over $10,000 annually participating, (compared to only 2% of the households making less than $4,000 and 9% of the households making $4,000 to $7,500 participating). The average frequency of participation was less than two times annually. Statewide volume of participation was measured at 0.63 adult activity days per household per year.

Attending Outdoor Dramas and Concerts - #24

A little over 10% of North Carolina households participated in this activity generating a volume of adult activity days that makes it number twenty-four among the thirty-five activities discussed herein. Frequency of participation in this activity had a median of less than two times annually with males and females participating almost equally--the female participation being just slightly higher. Total annual household income appears to affect participation in this activity markedly. Two per cent of the households in the $4,000 or less category participated. The percentage of households in the categories of $4,000 to $7,500 and $7,500 to $10,000 participating was about equal--10%. The percentage of households in the highest income category, over $10,000, participating was 20%. On a statewide basis, there was an average level of participation amounting to 0.52 adult activity days per household per year.

Rock Hunting - #25

In terms of volume of adult activity days spent in an activity rock hunting ranked twenty-fifth among the thirty-five activities listed on the survey questionnaire. By percentage of households having some participation, rock hunting was twenty-sixth; a close correlation to the activity days measure. Actually, less than 5% of North Carolina households participated. About 4% of the household

heads hunted rocks while a similar percentage (3.4%) of the wives did so. Frequency of participation was evenly distributed between one to four occasions. However, there was a group who participated eleven or more times a year that amounted to about 30% of the entire number of participants. The lowest income group of households had only one-half the proportion of participants (1.5%) as the two middle income groups (3.2%) and only one-sixth as much as the highest income group (9%). The mean adult activity days per household per year for the State was 0.51.

Ice Skating - #26

Almost 5% of North Carolina households participated in this activity to some extent, (at least one household member at least once a year). Men and women participated at equal rates with the median frequency of participation being two times annually. Survey results indicate a positive linear relationship between household income and proportion of participation. Less than 1% of the households with less than $4,000 annual income participated. Households with an annual income of $4,000 to $7,500 had 3% participation. Households making $7,500 to $10,000 had 6% participation. Households making over $10,000 a year had 10% participation. The survey analysis revealed that 0.38 adult activity days per household per year were spent in this activity on a statewide basis.

Canoeing for Exercise - #27

Canoeing for exercise was an activity of only 2.5% of North Carolina households. This small group, however, appears quite devoted to the pursuit of this activity since more than two-thirds of the group participated with a frequency greater than six times annually and about one-third participated on more than eleven occasions per year. Percentage of male participants is greater than female by about two to one. Based upon the survey sample,

this activity is virtually unknown to households in the $4,000 or less annual income group with the statistical results of the analysis indicating 0% of the households involved. This was likewise true for the group $7,500 to $10,000. However, 3% of the households making $4,000 to $7,500 participated. Almost 5% of the households in the over $10,000 annual income bracket participated. Viewed on a statewide basis, this activity accounted for 0.37 adult activity days per household per year of outdoor recreation demand.

Wildlife Photography - #28

Only 2.5% of North Carolina households take part in this recreational pursuit. Even so, slightly more than half a million adult activity days of participation were measured by the survey. Males showed a slightly greater propensity toward this activity than did the females with about 2% and 1% of each respective category participating. As with the preceding activity, canoeing for exercise, this activity was not pursued by the lowest income group of households with the survey sample analysis indicating 0% participation. Of the next highest income group 2% participated. The upper two income groups had proportions of 4% and 5% respectively participating. There were 0.34 adult activity days per household per year measured as the statewide average volume of demand for this activity.

Sailing - #29

By percentage of households participating, this activity ranks thirty-second with only a little more than 2% of the State's households taking part. By volume of adult activity days, however, it ranks twenty-ninth. The percentage of male participants outnumbered female almost two to one, yet, in almost all cases where a married couple made up the household, both the husband and wife took part. The distribution of responses to the frequency of participation question yield a median frequency of about four occasions annually.

The appeal of this activity was most strongly evidenced in the highest income class with fully 5% of these households (over $10,000 annual income) participating. Participation in the activity by households in the lower two income classes was practically non-existent. Only 2% of the households making $7,500 to $10,000 annually sailed. Average volume of participation, statewide, was 0.32 adult activity days per household per year.

Archery - #30

This was not a common activity of North Carolina households, although, about 3% of them did have some participation. By percentage of household involvement, this activity is ranked twenty-ninth while in terms of total adult activity days, it is ranked thirtieth. Women participated at a rate of one-third that of men with 1% and 3% of each respective group being involved to some degree. Frequency-wise, over 60% of the household heads participating reported doing so five or more times a year. By income, this activity was most popular among households with annual incomes of $7,500 to $10,000; the percentage of those households participating being about 5%. The income category in which the activity was the next most popular was $4,000 to $7,500, with a rate of a little less than 5%. The households in the $10,000 and over group participated at a rate of about 3%. According to the sample survey, 0% of those households with annual incomes of less than $4,000 participated. Statewide the volume of participation amounted to 0.32 adult activity days per household per year.

Showing Horses - Rings and Arenas - #31

This was the next to the least popular activity of the thirty-five listed on the questionnaire when viewed in terms of percentage of households having some degree of participation (2%), and this activity ranked thirty-first in terms of total adult activity days.

Male and female rates of participation were about equal. The median frequency of participation was about four times annually. The statewide volume of participation was determined to be about 0.30 adult activity days per household per year. The lowest income group of households had virtually no participation in this activity. The income group with the most participation was comprised of those households making $7,500 to $10,000 annually as slightly more than 4% of them participated to some degree. About 3% of the households whose income was $10,000 or over and about 2% of the households with incomes of $4,000 to $7,500 participated.

Hiking - #32

About 3% of North Carolina households had one or more members that hiked with packs one or more times a year. About one-half more males participated than did females with the median annual frequency being about three occasions. The lowest income group participated at a rate of 0% according to the survey sample. Participation of the middle two income groups was nearly equal at about 3% of the households. Almost 6% of the households making $10,000 or more annually hiked. The statewide average rate of annual participation was 0.28 adult activity days per household.

Snow Skiing - #33

This activity, facilities for which were virtually nonexistent within the State a decade ago, was one of the least popular activities in terms of total number of days of participation. However, the number of households in the State that did snow ski to some extent approached 4%. The median frequency of participation was slightly less than three occasions per year, yet, almost one-third of the participants skied six times or more and 10% did so in excess of eleven times annually. This activity was almost exclusively one for the $10,000 and above income group. The statewide average rate of participation amounted to 0.26 adult activity days per household.

Trap Shooting - #34

An uncommon activity among North Carolina households with only about 2% of them participating, trap shooting still accounted for 241,000 adult activity days of outdoor recreation demand. Virtually all participaton in this activity was by males, with a median frequency of less than three times per year. About 2% of the households in the income group $4,000 to $7,500 participated. About 4% of the income groups $7,500 to $10,000 and over $10,000 reported participation. The income group representing households making less than $4,000 a year reported 0% participation, according to the survey.

Canoeing to View Scenery - #35

This was the least popular activity among the thirty-five listed in both terms of total volume of participation and number of households involved. Median frequency of participation was slightly less than two occasions annually, although a full 40% of the participants reported doing so more than five times a year. Only about 1% of the households in each of the income categories of $4,000 to $7,500 and $7,500 to $10,000 participated. A little more than 3% of the households in the category of $10,000 or more annual income participated and virtually none of the households in the lowest category of income, less than $4,000, participated. The statewide average rate of participation was 0.15 adult activity days per household per year.

Other Activities

Over 9% of the survey sample reported activities other than the thirty-five listed on the questionnaire. The most common ones in decreasing order of frequency reported were gardening, car racing (actually an outdoor game or sport), and walking.

TABLE IV. 5

(42-3.00)

Adult Participation Frequency By Activity, 1971

#1 - Pleasure Driving

60.4% of all households
50.7% of all household heads
56.6% of all wives of heads
9.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-5	18.1	19.9	15.2
6-10	16.8	17.1	13.6
11-15	15.9	14.6	16.7
16-25	17.6	16.9	19.7
26+	31.6	31.5	34.8

Mean Adult Activity Days Per Household = 18.52

#2 - Sightseeing

55.3% of all households
44.2% of all household heads
51.2% of all wives of heads
7.7% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	10.5	12.3	5.4
2	9.0	9.1	21.4
3	9.6	8.8	10.7
4	7.1	8.6	7.1
5	7.1	6.7	7.1
6-10	16.1	16.3	12.5
11-24	20.5	18.4	12.5
25+	20.1	19.8	23.2

Mean Adult Activity Days Per Household = 10.85

#3 - Picnicking

49.2% of all households
40.8% of all household heads
46.8% of all wives of heads
9.3% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	9.4	10.6	16.1
2	17.2	15.5	10.3
3	13.5	14.7	20.5
4	10.4	10.9	5.9
5	6.4	6.7	4.4
6-10	24.6	23.4	22.0
11+	18.5	18.2	20.6

Mean Adult Activity Days Per Household = 5.98

#4 - Playing Outdoor Games

24.8% of all households
18.9% of all household heads
15.4% of all wives of heads
6.3% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-3	10.9	16.1	2.2
4-6	18.8	18.7	19.5
7-10	16.6	16.1	6.5
11-15	15.4	17.9	21.7
16-20	9.4	8.1	8.7
21-25	9.4	8.1	4.4
26+	19.6	15.2	36.8

Mean Adult Activity Days Per Household = 5.35

#5 - Viewing Outdoor Games

33.7% of all households
26.6% of all household heads
25.0% of all wives of heads
7.7% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	6.2	6.6	1.8
2	6.2	7.7	5.4
3	7.7	6.6	7.1
4	6.7	6.0	5.4
5	8.2	6.6	1.8
6-10	31.9	29.7	21.5
11+	33.0	36.8	57.1

Mean Adult Activity Days Per Household = 5.32

#6 - Swimming - Other than pool

33.7% of all households
26.9% of all household heads
25.7% of all wives of heads
7.4% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	9.2	9.6	5.6
2	9.7	11.8	7.4
3	11.7	10.2	7.4
4	6.1	5.9	5.6
5	10.2	9.6	5.6
6-10	27.1	25.5	25.9
11+	26.0	27.3	42.6

Mean Adult Activity Days Per Household = 4.65

TABLE IV. 5 (Cont.)

(42-3.00)

Adult Participation Frequency By Activity, 1971

#7 - Nature Walking

28.8% of all households
21.4% of all household heads
23.5% of all wives of heads
4.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	12.2	13.5	7.0
2	10.3	10.5	10.5
3	7.7	6.4	3.5
4	6.4	6.4	7.0
5	6.4	5.3	-
6-10	13.5	12.3	24.5
11+	43.6	45.6	47.5

Mean Adult Activity Days Per Household = 4.26

#8 - Swimming - Pool

30.2% of all households
19.2% of all household heads
20.9% of all wives of heads
7.1% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	5.0	5.9	-
2	12.9	11.2	5.8
3	10.0	10.5	11.5
4	9.3	7.2	5.8
5	7.9	5.9	5.8
6-10	22.1	22.5	28.9
11+	32.8	36.8	42.3

Mean Adult Activity Days Per Household = 4.06

#9 - Fishing

46.3% of all households
40.0% of all household heads
18.0% of all wives of heads
6.5% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	7.6	13.0	12.8
2	12.4	14.5	8.5
3	8.2	8.4	8.5
4	7.6	6.1	2.1
5	8.2	8.4	6.4
6-10	19.2	16.8	19.1
11+	36.8	32.8	42.6

Mean Adult Activity Days Per Household = 3.84

#10 - Bird Watching

11.0% of all households
7.6% of all household heads
9.5% of all wives of heads
1.2% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-5	12.7	11.6	-
6-10	18.2	13.0	33.3
11-15	12.7	14.4	33.3
16-25	12.7	11.6	22.2
26+	43.6	49.3	11.1

Mean Adult Activity Days Per Household = 3.40

#11 - Golf

16.3% of all households
14.8% of all household heads
4.3% of all wives of heads
1.8% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-3	13.0	25.8	7.7
4-6	13.0	19.4	15.4
7-10	9.2	3.2	23.1
11-15	19.4	16.1	15.4
16-20	7.4	12.9	7.7
21+	38.0	22.6	30.8

Mean Adult Activity Days Per Household = 2.90

#12 - Hunting

25.8% of all households
23.8% of all household heads
2.1% of all wives of heads
3.7% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	8.7	26.7	3.7
2	8.7	20.0	11.1
3	11.6	13.3	29.6
4	8.7	-	7.4
5	5.8	6.7	7.4
6-10	24.2	20.0	22.2
11+	32.3	6.7	18.5

Mean Adult Activity Days Per Household = 2.17

TABLE IV. 5 (Cont.)

(42-3.00)

Adult Participation Frequency By Activity, 1971

#13 - Visiting Historic Sites

28.4% of all households
23.6% of all household heads
26.7% of all wives of heads
3.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	29.7	30.8	22.7
2	21.8	24.1	31.8
3	17.6	16.4	22.7
4	4.2	6.7	4.5
5	9.7	7.7	-
6+	17.0	14.4	18.2

Mean Adult Activity Days Per Household = 1.93

#14 - Camping

19.8% of all households
16.3% of all household heads
15.0% of all wives of heads
4.5% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	24.4	27.5	15.2
2	19.3	16.5	27.3
3	10.9	10.1	15.2
4	3.4	5.5	6.1
5	3.4	5.5	6.1
6-10	21.1	20.2	12.2
11+	17.6	14.7	18.2

Mean Adult Activity Days Per Household = 1.88

#15 - Power Boating

14.0% of all households
12.1% of all household heads
11.4% of all wives of heads
2.2% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	9.1	13.3	6.3
2	13.6	15.7	18.8
3	12.5	8.4	18.8
4	5.7	3.6	-
5	12.5	12.0	-
6-10	20.5	22.3	6.3
11+	26.1	27.7	50.0

Mean Adult Activity Days Per Household = 1.84

#16 - Biking

11.8% of all households
7.1% of all household heads
9.7% of all wives of heads
1.6% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	7.7	5.6	-
2	15.4	12.7	8.3
3	3.8	5.6	8.3
4	11.5	7.0	16.7
5	3.8	8.5	8.3
6-10	15.4	19.8	8.3
11+	42.3	40.8	50.0

Mean Adult Activity Days Per Household = 1.66

#17 - Tennis

11.0% of all households
6.7% of all household heads
5.9% of all wives of heads
2.6% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	10.2	11.6	-
2	8.2	11.6	-
3	16.3	9.3	-
4	4.1	2.3	5.3
5	14.3	18.6	10.5
6-10	12.2	11.6	31.6
11+	34.7	34.9	52.6

Mean Adult Activity Days Per Household = 1.26

#18 - Water Skiing

8.4% of all households
6.6% of all household heads
4.8% of all wives of heads
1.1% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	6.3	14.3	-
2	18.7	11.4	12.5
3	4.2	8.6	12.5
4	6.3	2.9	12.5
5	10.4	11.4	12.5
6-10	18.8	14.3	-
11+	35.4	37.1	50.0

Mean Adult Activity Days Per Household = 1.01

TABLE IV. 5 (Cont.)
(42-3.00)

Adult Participation Frequency By Activity, 1971

#19 - Horseback Riding on Trail

7.5% of all households
4.5% of all household heads
4.4% of all wives of heads
1.9% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	21.2	21.9	-
2-3	12.1	18.8	14.3
4-5	9.1	9.4	28.5
6-10	21.3	18.8	7.1
11-20	18.2	9.4	14.2
21+	18.2	21.9	35.7

Mean Adult Activity Days Per Household = 0.88

#20 - Mountain Climbing

8.2% of all households
6.6% of all household heads
6.4% of all wives of heads
2.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	25.0	27.7	16.6
2	12.5	14.9	25.0
3	8.3	6.4	-
4	10.4	14.9	-
5	4.2	4.3	8.3
6-10	20.9	19.1	33.3
11+	18.8	12.8	16.6

Mean Adult Activity Days Per Household = 0.76

#21 - Target Shooting

9.3% of all households
7.3% of all household heads
1.2% of all wives of heads
1.8% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	9.4	-	15.4
2	15.1	11.1	7.7
3	15.1	22.2	7.7
4	11.3	11.1	7.7
5	3.8	-	7.7
6-10	22.7	11.1	7.7
11+	22.7	44.4	46.2

Mean Adult Activity Days Per Household = 0.75

#22 - Visiting Zoo

18.5% of all households
14.2% of all household heads
17.4% of all wives of heads
2.3% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	61.5	59.8	58.8
2	20.2	19.7	35.3
3	6.7	8.7	5.9
4	-	2.4	-
5+	11.5	9.4	-

Mean Adult Activity Days Per Household = 0.68

#23 - Viewing Cultural Exhibits

12.7% of all households
8.9% of all household heads
11.9% of all wives of heads
1.8% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	33.8	35.6	53.8
2	30.8	29.9	7.7
3	13.8	12.6	23.1
4	6.2	6.9	7.7
5	7.7	6.9	-
6+	7.7	7.9	7.7

Mean Adult Activity Days Per Household = 0.63

#24 - Attending Outdoor Dramas - Concerts

10.7% of all households
8.4% of all household heads
9.6% of all wives of heads
2.2% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	42.6	42.9	43.8
2	24.6	25.7	18.8
3	13.1	14.3	18.8
4	9.8	8.6	6.3
5	1.6	-	6.3
6+	8.2	8.6	6.3

Mean Adult Activity Days Per Household = 0.52

TABLE IV. 5 (Cont.)

(42-3.00)

Adult Participation Frequency By Activity, 1971

#25 - Rock Hunting

4.8% of all households
3.6% of all household heads
3.4% of all wives of heads
0.7% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	11.5	16.0	20.0
2	11.5	16.0	40.0
3	15.4	8.0	20.0
4	11.5	16.0	-
5	3.8	4.0	-
6-10	11.5	16.0	-
11+	34.6	24.0	20.0

Mean Adult Activity Days Per Household = 0.51

#26 - Ice Skating - Sledding

4.9% of all households
3.8% of all household heads
3.8% of all wives of heads
1.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	21.4	28.6	-
2	28.6	28.6	14.3
3	17.9	17.9	28.6
4	3.6	-	-
5	-	-	14.3
6-10	10.7	7.2	14.3
11+	17.9	17.9	28.6

Mean Adult Activity Days Per Household = 0.38

#27 - Canoeing - Exercise

2.5% of all households
2.5% of all household heads
1.2% of all wives of heads
0.5% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	11.1	-	-
2	5.6	11.1	-
3	5.6	11.1	-
4	-	-	-
5	16.7	22.2	-
6-10	27.8	33.3	50.0
11+	33.3	22.2	50.0

Mean Adult Activity Days Per Household = 0.37

#28 - Wildlife Photography

2.5% of all households
1.9% of all household heads
1.2% of all wives of heads
- of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-3	14.3	11.1	-
4-5	21.4	11.1	-
6-10	7.1	22.2	-
11-20	28.5	22.2	-
21+	28.6	33.3	-

Mean Adult Activity Days Per Household = 0.34

#29 - Sailing

2.3% of all households
2.1% of all household heads
1.2% of all wives of heads
0.4% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	13.3	12.5	-
2	20.0	18.8	-
3	6.7	-	-
4	13.3	12.5	-
5	6.7	6.3	33.3
6-10	20.0	25.0	33.3
11+	20.0	25.0	33.3

Mean Adult Activity Days Per Household = 0.32

#30 - Archery

3.2% of all households
3.2% of all household heads
1.0% of all wives of heads
0.1% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	17.4	14.3	-
2	4.3	14.3	-
3	8.7	-	-
4	8.7	-	-
5	13.0	28.6	100.0
6-10	13.0	14.3	-
11+	34.8	28.6	-

Mean Adult Activity Days Per Household = 0.32

TABLE IV. 5 (Cont.)

(42-3.00)

Adult Participation Frequency By Activity, 1971

#31 - Showing Horses in Rings

2.1% of all households
1.6% of all household heads
1.6% of all wives of heads
0.5% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1-2	8.3	16.6	25.0
3	25.0	25.0	-
4	25.0	25.0	25.0
5+	41.7	33.3	50.0

Mean Adult Activity Days Per Household = 0.30

#32 - Hiking with Pack

3.4% of all households
2.5% of all household heads
1.6% of all wives of heads
0.7% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	22.2	25.0	20.0
2	11.1	-	-
3	16.7	25.0	-
4	11.1	8.3	40.0
5+	38.9	41.7	40.0

Mean Adult Activity Days Per Household = 0.28

#33 - Snow Skiing

3.7% of all households
2.7% of all household heads
2.5% of all wives of heads
1.0% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	15.0	22.2	28.6
2	25.0	27.8	14.3
3	15.0	11.1	42.9
4	10.0	5.6	14.3
5	5.0	5.6	-
6-10	20.0	22.2	-
11+	10.0	5.6	-

Mean Adult Activity Days Per Household = 0.26

#34 - Trap - Skeet Shooting

2.5% of all households
2.2% of all household heads
0.4% of all wives of heads
0.3% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	31.3	-	-
2	12.5	-	-
3	6.3	33.3	-
4	-	-	50.0
5	12.5	-	-
6-10	25.0	33.3	50.0
11+	12.6	33.3	-

Mean Adult Activity Days Per Household = 0.16

#35 - Canoeing View-Scenery

1.5% of all households
1.5% of all household heads
1.0% of all wives of heads
0.1% of all other adults

Frequency Distribution for Participants

Activity Times	% Heads	% Wives	% Others
1	25.0	-	-
2	33.3	57.1	-
3	-	-	-
4	-	-	-
5+	41.7	42.9	100.0

Mean Adult Activity Days Per Household = 0.15

Desired Activities

In addition to asking the survey respondents what they did, the questionnaire also provided space for the respondents to indicate which of the activities listed they would like to engage in but did not. All of the activities received some affirmative replies. The activity receiving the most indication of interest, and thus potential demand, was snow skiing. It was followed, in order of frequency mentioned, by golf, fishing, tennis, camping, and horseback riding on trails.

In no case, however, did more than 5% of the sample indicate an interest in a single activity. In some case, though, the expression of this latent demand through actual participation would represent a very large increase. There were, for example, in terms of survey respondents, more nonsnow skiers indicating an interest in the activity than there were skiers.

Trips--Present Behavior of North Carolina Residents 42-4.00

Another major section of the questionnaire used in the household survey of recreation demand was designed to elicit information regarding the volume and types of recreation trips taken away from home. In order to accomplish this, the questionnaire sought information on two basic categories of recreation trips. The responses were classed as being either pertinent to vacation trips or non-vacation trips. The non-vacation trips were further broken down according to the season (spring, summer, fall, winter) in which they occurred.

The respondent was asked whether or not members of the household took a vacation trip during the preceding twelve months (1971); and, if so, whether or not the trip involved outdoor recreation pursuits. Further information was solicited only from those respondents indicating that they had some form of outdoor recreation during the vacation trip.

These respondents were also asked to give information relevant to the vacation trip such as: length of stay away from home; the primary recreation site and secondary recreation sites visited; the total distance traveled on the trip and whether or not the trip was entirely within North Carolina; the mode of travel and other states, if any, that were visited; the main outdoor recreation activities engaged in; the number of persons of the household that went; purposes other than outdoor recreation that prompted the trip; and, the month of the year (1971) the trip occurred.

In addition to asking about vacations, the respondent was asked to indicate the total number of non-vacation trips away from home, by season, during which any type of outdoor recreation was engaged in. Then, for each season, the respondent was asked to give more detailed information on the three most recent trips taken during the seasons for which he had listed a number of trips.

Information gathered regarding these non-vacation trips included: the length of stay away from home during the trip; where the household went (destination) and how far from home it was; the primary and secondary recreation sites visited; the mode of travel; whether the primary site visited was in North Carolina; the main outdoor recreation activities engaged in during the trip; the members of the household that went; purposes other than outdoor recreation that prompted the trip; and, the month of the year (1971), the trip was taken.

The responses gathered by the survey questionnaires were compiled and analyzed by such factors as race, income, and residence.

Trip Definitions — 42-4.10

The basic and most important distinction made between the various trips reported, other than whether it was a vacation or not, was accomplished by classifying the primary recreation site visited. The aim of this procedure was to enable the quantification of visitor days demand at various classes of outdoor recreation areas.

By doing so, a comparison of demand for certain types of outdoor recreation areas to the capacity of those types of areas (a product of the supply inventory analysis, Chapter V) was made possible. The ultimate aim of this comparison, then, was the establishment of standards for acquisition and development of recreation lands that would identify areas of greatest need, in terms of outdoor recreation areas and facilities, in the State. The classes of areas utilized comformed to the Bureau of Outdoor Recreation system and the North Carolina SCORP Sub-Class System, (see Chapter V).

Participation Characteristics of North Carolina Household Residents by Type of Trip, 1971 — 42-4.20

Vacation Trips — 42-4.21

The household survey of outdoor recreation demand revealed that North Carolinians spend about 29,000,000 visitor days annually in the pursuit of recreation activities that occur during vacations. Almost 70% of this demand accrues to recreation sites located outside the borders of North Carolina. Tables IV. 6 and IV. 7 list adult vacation days and total vacation days by subclass of site visited along with a measure of out-of-state demand generated by residents of North Carolina households, (also, data for non-vacation trips is given but will be discussed later in this chapter).

In terms of recreation demand expressed through trips, vacations account for about 29% of the total amount generated by State residents.

The survey revealed that 60.7% of North Carolina households take vacations and 82.9% of these involve some form of outdoor recreation. Therefore, 50.3% of the State's households engage in vacations with outdoor recreation activities. This represents 759,000 households.

The average number of persons in the vacation party amounts to 3.78 persons. The mean length of the vacation was determined to be 5.91 days.

The tabulations of Tables IV. 6 and IV. 7 indicate that the most popular in-state destinations for vacationing households are (1) medium and (2) low intensity use specialized outdoor recreation areas and (3) destination parks.

Of major interest to planners and social scientists is the variance in vacation behavior introduced by the effect of total household income. The tables that follow present several vacation-related parameters broken down by household income.

In every case, the figures given are in terms of percentage of households in a certain income category that responded positively to that particular question on the survey questionnaire. (The vacation by income tables include: IV. 8, IV. 9, IV.10, IV. 11, IV. 12, IV. 13, IV. 14, and IV. 15.

Another area of interest is the variance in vacation behavior noted when the survey results are analyzed by race. Some of the vacation-related parameters contained in the survey questionnaire are presented in Table IV. 16. Again, the figures are in terms of per cent of households within a certain race category that responded positively to that particular question on the survey.

Nonvacation Trips — 42-4.22

Respondents to the household survey were asked to give the total number of non-vacation trips, by season, in which they engaged in some form of outdoor recreation activity. The analysis of the survey results indicated that about 29% of North Carolina households take trips of this type during the spring (March, April, May); about 50% during summer (June, July, August); about 39% during the fall (September, October, November); and, about 26% during the winter (December, January, February).

This amounts to 0.93 spring recreation trips per household for an average of 2.33 days per household; 1.97 summer recreation trips per household for an average of 5.52 days per household; 1.23 fall recreation trips per household for an average of 2.83 days per household; 0.99 winter recreation trips per household for an average of 2.87 days per household.

These figures along with a percentage distribution by number of trips taken per season are presented in Tables IV. 17, IV. 18, IV. 19, and IV. 20.

Data regarding the length of trips is presented by season in Tables IV. 21, IV. 22, IV. 23, and IV. 24.

TABLE IV. 6

(42-4.21)

ADULT VISITOR-DAYS PARTICIPATION AT OUTDOOR RECREATION SITES
BY NORTH CAROLINA HOUSEHOLDS - 1971

Site Sub-class	Vacation	Winter	Spring	Summer	Fall	Total
Mini-Park	-	-	-	-	-	-
Playground	-	-	-	-	-	-
Neighbhd Pk	-	-	75,000	-	-	75,000
Comb. NP & PG	-	-	-	-	-	-
Playfield	-	-	75,000	155,000	85,000	315,000
Commun. Park	-	-	-	-	-	-
City Park	50,000	160,000	95,000	495,000	175,000	975,000
District Park	-	-	-	-	-	-
County Park	-	-	45,000	120,000	70,000	235,000
SORA Low	800,000	2,550,000	2,070,000	3,795,000	2,700,000	11,915,000
SORA Med.	3,440,000	1,275,000	1,680,000	5,205,000	1,920,000	13,520,000
SORA High	-	190,000	95,000	290,000	465,000	1,040,000
III SORA Low	85,000	490,000	140,000	120,000	210,000	1,045,000
State Park	135,000	275,000	120,000	665,000	405,000	1,600,000
Destin. Pk	575,000	295,000	140,000	765,000	675,000	2,450,000
Unique Nat.	-	-	20,000	-	70,000	90,000
Wilderness	-	-	-	-	20,000	20,000
Historic	220,000	240,000	315,000	580,000	230,000	1,585,000
Out of State	11,650,000	2,525,000	2,600,000	4,845,000	2,645,000	24,265,000
T O T A L	16,956,000	8,015,000	7,496,000	17,008,000	9,647,000	59,122,000

In State	34,865,000
Out of State	24,265,000

(Note - Detail may not add to total due to rounding)

TABLE IV. 7

(42-4.21)

TOTAL VISITOR-DAYS PARTICIPATION AT OUTDOOR RECREATION SITES BY NORTH CAROLINA HOUSEHOLDS - 1971

Site Sub-Class	Vacation	Winter	Spring	Summer	Fall	Total
Mini-Park	-	-	-	-	-	-
Play-Ground	-	-	-	-	-	-
Neighbhd. Park	-	-	127,500	-	-	130,250
Comb. NP & PG	-	-	-	-	-	-
Playfield	-	-	127,500	263,500	144,500	547,000
Comm. Park	-	-	-	-	-	-
City Park	85,000	272,000	161,500	481,500	297,500	1,693,500
District Park	-	-	-	-	-	-
County Park	-	-	76,500	204,000	119,000	408,000
SORA LOW	1,360,000	4,335,000	3,519,000	6,451,500	4,590,000	20,694,500
SORA MED	5,848,000	2,167,500	2,856,000	8,848,500	3,264,000	23,482,000
SORA HIGH	-	323,000	161,500	493,000	790,500	1,806,000
III SORA LOW	144,500	833,000	238,000	204,000	357,000	1,815,000
State Park	229,500	467,500	204,000	1,130,500	688,500	2,779,000
Destin. Park	977,500	501,500	238,000	1,300,500	1,147,500	4,255,250
Unique Natural	-	-	34,000	-	119,000	156,500
Wilder-ness	-	-	-	-	34,000	34,750
Historic	374,000	408,000	535,500	986,000	391,000	2,750,000
Out of State	19,805,000	4,292,500	4,420,000	8,236,500	4,496,500	42,145,000
TOTAL	28,825,200	13,625,500	12,743,200	28,913,600	16,399,900	100,507,400

In State	60,551,750
Out of State	42,145,000

(Note - Detail may not add to total due to rounding)

TABLE IV. 8

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
% of all households taking vacation	34.4*	61.5	65.6	83.6
% of vacationing households who spent time on outdoor recreation	69.6	83.5	79.7	90.3
% of all households taking vacation with outdoor recreation	23.7	51.0	53.1	75.2

*Figures are per cent of households within given income category.

TABLE IV. 9

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
% of families taking vacation of:				
one day	9.4*	6.6	3.8	5.1
overnight	9.4	-	-	1.3
2-3 nights	18.8	26.3	22.6	14.7
4 nights or more	65.6	67.1	73.6	79.9

*Figures are per cent of those households vacationing with outdoor recreation within given income category.

Note: Columnar totals may exceed 100% since some families took two trips in same vacation period.

TABLE IV. 10

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Number of persons in Party				
1	6.3*	3.8	1.9	1.3
2	25.0	23.1	24.5	26.4
3	9.5	14.1	18.9	18.3
4	25.0	30.8	28.4	27.0
5	12.5	12.8	7.5	12.6
6	3.1	5.1	7.5	7.5
7	3.1	3.8	3.8	2.5
8 or more	15.5	6.5	7.5	4.4

*Figures are per cent of those households vacationing with outdoor recreation within given income category.

TABLE IV. 11

(42-4.21)

VACATIONS BY HOUSEHOLDS INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Composition of Party:				
Entire Family	66.7*	77.6	88.7	82.4
Husband/Wife	26.1	17.2	5.7	10.7
One Parent, two Children	3.6	2.6	3.7	6.3
Only Children	3.6	2.6	1.9	0.6

*Figures are per cent of those households vacationing with outdoor recreation in given income category.

TABLE IV. 12

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Where was vacation spent:				
Entirely in N.C.	28.1*	35.5	22.6	21.5
Mainly in N.C.	-	3.9	1.9	5.8
Some in N.C.	9.4	11.9	7.6	11.5
Entirely Outside N.C.	62.5	48.7	67.9	61.2

*Figures are per cent of those households vacationing with outdoor recreation within a given income category.

TABLE IV. 13

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Distance traveled:				
0- 49 miles	-*	-	-	1.2
50- 99 miles	-	-	-	0.6
100-199 miles	3.1	-	5.7	5.0
200-399 miles	12.5	17.3	9.4	8.1
400-599 miles	12.5	16.0	13.2	9.5
Over 600 miles	62.5	64.0	62.3	71.9
Don't know	9.4	2.7	9.4	3.7

*Figures are per cent of those households vacationing with outdoor recreation in a given income category.

TABLE IV. 14

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Month Vacation Taken:				
January	6.3*	1.3	2.0	1.9
February	3.1	-	3.8	1.3
March	-	1.3	-	1.3
April	-	5.3	3.9	2.7
May	15.6	4.1	5.9	2.7
June	21.9	13.3	19.6	20.9
July	25.0	37.3	29.4	32.9
August	12.5	20.0	19.6	19.7
September	6.3	8.1	5.9	8.9
October	3.1	5.3	5.9	4.4
November	3.1	2.7	2.0	0.6
December	3.1	1.3	2.0	2.7

*Figures are per cent of those households vacationing with outdoor recreation in a given income category.

TABLE IV. 15

(42-4.21)

VACATIONS BY HOUSEHOLD INCOME, 1971

Parameter	Income Categories			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Main Vacation Activities:				
Fishing	12.1*	21.1	15.4	17.6
Swimming - Pool	12.1	10.5	11.5	13.8
Swimming - Other	24.2	31.6	26.9	46.5
Nature Walking	12.1	10.5	3.0	8.2
Picnicking	6.1	5.3	3.8	7.5
Pleasure Driving	9.1	13.2	9.6	7.5
Sightseeing	51.5	46.1	36.5	28.3
Other	42.5	36.7	52.9	52.4

*Figures are per cent of those households vacationing with outdoor recreation within a given income category.

(Columnar totals may add to more than 100% since some families took two trips in same vacation period.)

TABLE IV. 16

(42-4.21)

VACATIONS BY HOUSEHOLD RACE, 1971

Parameter	Race of Households	
	Whites	Non-Whites
Vacation	63.4*	44.3
With Outdoor Recreation	86.5	62.3
All Families	54.9	28.7
One day	5.0	5.9
Over night	1.6	2.9
2-3 nights	20.3	17.6
4+ nights	73.1	73.5
Distance Traveled:		
0- 49	0.6	-
50- 99	0.6	2.9
100-199	4.0	2.9
200-399	10.5	20.6
400-600	11.5	8.8
600+	67.8	61.8
Don't Know	5.0	2.9
Was Trip:		
Entirely in N.C.	25.1	23.5
Mainly in N.C.	3.7	2.9
Some in N.C.	11.1	11.8
Entirely out of N.C.	59.8	61.8
Not sure	0.3	-
Who Went:		
Entire family	82.7	64.7
Husband/Wife	18.9	23.6
Parent and Children	7.8	8.8
Only Children	1.1	2.9

*Figures are per cent of those household vacationing with outdoor recreation within a given race category.

TABLE IV. 17

(42-4.22)

SPRING NON-VACATION TRIPS, 1971

No. of Trips	% of All Households	% of Households Taking Trip	% of All Trips Taken
0	70.7	-	-
1	13.0	44.4	14.0
2	5.7	19.6	12.4
3	2.5	8.6	8.1
4	1.4	4.8	6.0
5-8	2.2	7.7	15.7
9+	4.1	13.9	43.7
Don't Know	0.3	1.0	-
All	100.0	100.0	100.0

Recreation Trips Per Household	0.93
Average Length of Trip (Days)	2.50
Days Per Household	2.33

TABLE IV. 18

(42-4.22)

SUMMER NON-VACATION TRIPS, 1971

No. of Trips	% of All Households	% of Households Taking Trip	% of All Trips Taken
0	49.9	-	-
1	16.5	33.0	8.7
2	9.2	18.4	9.7
3	8.5	17.0	13.5
4	2.2	4.5	4.7
5-8	4.2	8.4	15.5
9+	9.1	18.2	47.9
Don't Know	0.3	0.6	-
All	100.0	100.00	100.0

Recreation Trips Per Household	1.97
Average Length of Trip (Days)	2.80
Days Per Household	5.52

TABLE IV. 19

(42-4.22)

FALL NON-VACATION TRIPS, 1971

No. of Trips	% of All Households	% of Households Taking Trip	% of All Trips Taken
0	60.9	-	-
1	19.1	48.9	16.5
2	6.1	15.7	10.6
3	3.9	10.0	10.1
4	2.8	7.1	9.6
5-8	2.6	6.8	14.8
9+	4.5	11.4	38.5
Don't Know	-	-	-
All	100.0	100.0	100.0

Recreation Trips Per Household	1.23
Average Length of Trip (Days)	2.30
Days Per Household	2.83

TABLE IV. 20

(42-4.22)

WINTER NON-VACATION TRIPS, 1971

No. of Trips	% of All Households	% of Households Taking Trip	% of All Trips Taken
0	73.9	-	-
1	12.6	48.4	14.7
2	4.0	15.4	9.4
3	2.1	8.0	7.3
4	1.1	4.3	5.2
5-8	1.9	7.4	14.8
9+	4.2	16.0	48.6
Don't Know	0.1	0.5	-
All	100.0	100.0	100.0

Recreation Trips Per Household	0.99
Average Length of Trip (Days)	2.90
Days Per Household	2.87

TABLE IV. 21

(42-4.22)

SPRING OUTDOOR RECREATION TRIPS, 1971

Per Cent of All Households Taking at Least One Trip With Outdoor Recreation 29.3

Length of Trip	Per Cent of Households
Day Trip	13.7
Overnight Trip	6.7
Short Trip*	7.6
Long Trip**	5.2

Number of Trips Taken

Length of Trip	Per Household	All Households
Day Trip	.521	786,000
Overnight Trip	.199	300,000
Short Trip*	.160	241,000
Long Trip**	.062	94,000
All Spring Trips	.942	1,421,000

Average Persons Per Spring Trip 2.94

Total Adult Visitor Days

Length of Trip	Per Household	All Households
Day Trip	1.531	2,311,000
Overnight Trip	0.877	1,323,000
Short Trip	1.643	2,480,000
Long Trip	0.916	1,382,000
Total	4.968	7,496,000

* 2-3 nights

** 4 or more nights

TABLE IV. 22

(42-4.22)

SUMMER OUTDOOR RECREATION TRIPS, 1971

Per Cent of All Households Taking at Least One Trip With Outdoor Recreation 50.1

Length of Trip	Per Cent of Households
Day Trip	25.3
Overnight Trip	15.7
Short Trip*	12.4
Long Trip**	11.7

Number of Trips Taken

Length of Trip	Per Household	All Households
Day Trip	1.000	1,509,000
Overnight Trip	.509	768,000
Short Trip*	.317	478,000
Long Trip**	.155	234,000
All Summer Trips	1.981	2,989,000

Average Persons Per Summer Trip 3.09

Total Adult Visitor Days

Length of Trip	Per Household	All Households
Day Trip	3.090	4,663,000
Overnight Trip	2.359	3,560,000
Short Trip	3.426	5,170,000
Long Trip	2.396	3,615,000
Total	11.271	17,008,000

* 2-3 nights

** 4 or more nights

TABLE IV. 23

(42-4.22)

FALL OUTDOOR RECREATION TRIPS, 1971

Per Cent of All Households Taking at Least One Trip With Outdoor Recreation 39.1

Length of Trip	Per Cent of Households
Day Trip	19.8
Overnight Trip	10.7
Short Trip*	11.6
Long Trip**	5.3

Number of Trips Taken

Length of Trip	Per Household	All Households
Day Trip	.682	1,029,000
Overnight Trip	.262	395,000
Short Trip*	.216	326,000
Long Trip**	.070	106,000
All Fall Trips	1.230	1,856,000

Average Persons Per Fall Trip 2.93

Total Adult Visitor Days

Length of Trip	Per Household	All Households
Day Trip	1.998	3,015,000
Overnight Trip	1.150	1,736,000
Short Trip	2.215	3,343,000
Long Trip	1.029	1,553,000
Total	6.393	9,647,000

* 2-3 nights

** 4 or more nights

TABLE IV. 24

(42-4.22)

WINTER OUTDOOR RECREATION TRIPS, 1971

Per Cent of All Households Taking at Least One Trip With Outdoor Recreation 26.1

Length of Trip	Per Cent of Households
Day Trip	14.2
Overnight Trip	7.1
Short Trip*	6.1
Long Trip**	5.4

Number of Trips Taken

Length of Trip	Per Household	All Households
Day Trip	.486	733,000
Overnight Trip	.268	404,000
Short Trip*	.161	243,000
Long Trip**	.075	113,000
All Winter Trips	.990	1,493,000

Average Persons Per Winter Trip 2.91

Total Adult Visitor Days

Length of Trip	Per Household	All Households
Day Trip	1.414	2,133,000
Overnight Trip	1.168	1,763,000
Short Trip	1.640	2,475,000
Long Trip	1.089	1,644,000
Total	5.311	8,015,000

* 2-3 nights
** 4 or more nights

As with the data recorded for vacation trips, the analysis of the household survey included consideration of the variance in non-vacation trip behavior that was related to total household income. In terms of number of trips taken by season, a general idea of this disparity is revealed in the figures of Table IV. 25 below.

TABLE IV. 25
(42-4.22)

NON-VACATION TRIPS BY INCOME, 1971

		Trips/Household 1971			
Season	All	$0-3,999	$4,000-7,499	$7,500-10,000	$10,000+
Winter	.857	0.54	.95	.67	1.23
Fall	1.156	0.76	1.26	1.30	1.87
Summer	1.864	1.27	1.54	2.05	2.69
Spring	.921	0.69	.89	.82	1.39
Total	4.798	3.26	4.64	4.84	7.18

Other parameters regarding non-vacation trips are presented in the following Tables (IV. 26, IV. 27, IV. 28, IV. 29) by season. The data is in terms of percentages of households within a certain income category that responded positively to that particular parameter of the survey questionnaire.

TABLE IV. 26

(42-4.22)

SPRING TRIPS BY INCOME CLASS OF HOUSEHOLD, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000
Distance to Site in Miles	0-24	40.8 *	15.5	35.3	8.8
	25-49	12.2	10.3	8.8	13.6
	50-74	14.3	13.8	11.8	11.6
	75-99	2.0	8.6	8.8	10.9
	100-499	24.5	44.8	20.6	46.3
	500+	6.1	6.9	14.7	8.8
Was Site in N.C.	Yes	83.7	70.7	67.6	57.1
	No	16.3	29.3	32.4	42.9
Number of Other Sites Visited	0	87.5	92.6	87.5	86.6
	1-2	12.5	5.5	12.5	11.3
	3		1.8		1.4
	4				0.7
	5				
	6+				
Means of Travel	Car	75.5	82.8	91.2	94.1
	Plane		6.9	2.9	3.3
	Train				
	Bus	4.1	1.7		
	Other	20.4	6.9	2.9	
	Car & Other		1.7	2.9	2.6
Main Activity	Fishing	27.7	20.7	31.4	13.8
	Play Outdoor Games	14.9		5.7	
	Pleasure Drive	10.6	8.6	14.3	7.2
	Sightseeing	23.4	22.4	5.7	19.7
	Swimming-(Not Pool)	6.5	3.4		10.5
What Else Did You Do	Nothing	60.9	45.1	50.0	41.3
	Sightsee	13.0	23.5	30.0	19.6
	Shop	4.3	2.0		1.4
	Visit	6.5		3.3	
	Picnic	4.3	4.0	3.3	7.0
	Other	10.9	25.5	13.3	30.8

*Figures are per cent of those households taking Spring trips with outdoor recreation within a given income category.

TABLE IV. 26 CONT.

(42-4.22)

SPRING TRIPS, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000
Was Place Profit Seeking	Yes	20.4	22.8	29.4	30.6
	No	79.6	77.2	70.6	69.4
Who Went	Entire Family	74.5*	56.6	38.7	63.5
	Husband/ Wife	17.0	41.5	41.9	26.4
	Parent/ Children	2.1	1.9	6.5	10.1
	Only Children	6.4		12.9	
Who Else Went	Relatives	8.5	16.0	13.8	16.1
	Friends	27.7	36.0	34.5	19.0
	No One	63.8	48.0	51.7	65.0
Did Trip Have Other Purpose	Yes	34.7	32.1	23.5	32.7
	No	65.3	67.9	76.5	67.3
What Was This Purpose	Visit Friends	64.7	55.6	37.5	39.2
	Business	5.9	5.6	25.0	23.5
	Other	29.4	38.9	37.5	37.3
How Long Was Trip (Days)	1	75.5	48.3	63.9	34.6
	2	8.2	19.0	16.7	26.8
	3	2.0	15.5	5.6	18.3
	4	2.0	6.9	2.8	6.5
	5-7	8.1	10.3	2.8	11.1
	8+	4.1		8.3	2.6

*Figures are per cent of those households taking Spring trips with outdoor recreation within a given income category.

TABLE IV. 27

(42-4.22)

SUMMER TRIPS BY INCOME OF HOUSEHOLD, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Distance to Site in Miles	0-24	32.6*	15.8	20.8	7.2
	25-49	14.7	15.8	11.9	11.2
	50-74	13.7	13.7	7.9	11.2
	75-99	6.3	9.4	7.9	14.8
	100-499	31.6	40.3	36.6	45.2
	500+	1.1	5.0	14.9	10.4
Was Site in N.C.	Yes	80.8	77.6	62.1	61.5
	No	19.1	22.4	37.9	38.5
Number of Other Sites Visited	0	78.1	86.4	80.0	81.0
	1-2	19.8	10.6	15.8	16.1
	3	1.0	2.3	1.1	2.8
	4	1.0		1.1	
	5			1.1	
	6+		0.8	1.1	
Means of Travel	Car	89.9	93.7	89.3	97.0
	Plane		2.8	3.9	1.5
	Train		0.7		
	Bus	3.0		2.9	0.4
	Other	7.1	2.8		0.4
	Car & Other			3.9	0.8
Main Activity	Fishing	22.6	12.3	16.0	10.6
	Swimming-(Not Pool)	9.3	15.1	22.0	23.2
	Picnicking	8.2	8.9	11.0	5.3
	Pleasure Drive	12.4	13.7	5.0	7.2
	Sightseeing	23.7	20.5	14.0	19.7
	Camping			6.0	10.3
What Else Did You Do	Nothing	52.1	31.7	27.8	23.0
	Sightseeing	14.6	25.9	21.1	19.5
	Shop	1.0	1.4		0.8
	Visit	6.3		1.1	0.4
	Picnic	9.4	10.1	4.4	12.1
	Other	16.7	30.9	45.6	44.4

*Figures are per cent of those households taking summer trips with outdoor recreation within a given income category.

TABLE IV. 27 CONT.

(42-4.22)

SUMMER TRIPS, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Was Place Profit Seeking	Yes	21.4	34.5	34.0	42.0
	No	78.6	65.5	66.0	58.0
Who Went	Entire Family	71.1*	71.1	58.8	73.3
	Husband/ Wife	22.7	19.7	23.5	16.8
	Parent/ Children		4.9	9.8	8.4
	Only Children	6.2	4.2	7.8	1.5
Who Else Went	Relatives	18.1	20.9	17.6	12.2
	Friends	24.5	29.1	25.3	17.5
	No One	57.4	50.0	57.1	70.2
Did Trip Have Other Purpose	Yes	33.3	16.9	17.5	19.7
	No	66.7	83.1	82.5	80.3
What Was This Purpose	Visit Friends	50.0	34.8	55.6	45.1
	Business	2.9	8.7	5.6	23.5
	Other	47.1	56.5	38.9	31.4
How Long Was Trip (Days)	1	70.4	52.1	47.6	31.7
	2	7.1	21.1	19.4	25.7
	3	10.2	10.6	16.5	19.6
	4	2.0	5.6	19.4	3.4
	5-7	3.0	5.6	7.8	14.3
	8+	7.1	4.9	6.8	5.3

*Figures are per cent of those households taking summer trips with outdoor recreation within a given income category.

TABLE IV. 28

(42-4.22)

FALL TRIPS BY INCOME OF HOUSEHOLD, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Distance to Site in Miles	0-24	22.8*	18.2	20.6	8.9
	25-49	21.1	18.2	14.3	13.3
	50-74	21.1	19.3	7.9	13.8
	75-99	3.5	6.8	7.9	14.3
	100-499	24.6	30.7	38.1	43.8
	500+	7.0	6.8	11.1	5.9
Was Site in N.C.	Yes	72.9	77.2	66.7	70.6
	No	27.1	22.8	33.3	29.4
Number of Other Sites Visited	0	72.9	70.9	81.4	80.5
	1-2	27.1	27.2	16.9	17.5
	3				1.5
	4		1.9	1.7	
	5				
	6+				0.5
Means of Travel	Car	83.1	91.3	95.2	94.9
	Plane	1.7	5.4	3.2	0.5
	Train				
	Bus	8.5			
	Other	6.8	3.3	1.6	3.7
	Car & Other				0.9
Main Activity	Hunting	10.7	6.5	12.7	7.1
	Fishing	12.5	23.9	12.7	11.8
	Picnicking	1.8	12.0	9.5	7.5
	Pleasure Driving	14.3	18.5	4.8	11.3
	Sightseeing	30.4	18.5	17.5	15.1
	View Otdr Games	8.9	3.3	3.2	5.2
	Nature Walk		5.4	6.4	9.4
What Else Did You Do	Nothing	54.5	44.2	31.0	39.0
	Sightsee	10.9	27.9	20.7	22.9
	Shop	10.9	1.2	1.7	1.0
	Visit	12.7	1.2	5.2	
	Picnic	3.6	4.7	8.6	8.1
	Other	7.2	20.9	32.8	24.3

*Figures are per cent of those households taking fall trips with outdoor recreation within a given income category.

TABLE IV. 28 CONT.

(42-4.22)

FALL TRIPS, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Was Place Profit Seeking	Yes	20.3	29.2	24.2	31.0
	No	79.7	70.8	75.8	69.0
Who Went	Entire Family	61.0*	50.1	61.3	60.8
	Husband/ Wife	25.4	36.4	25.8	26.4
	Parents/ Children	3.4	3.4	8.1	11.8
	Only Children	10.2	1.1	4.8	0.9
Who Else Went	Relatives	31.5	13.1	21.8	11.2
	Friends	33.4	28.6	32.7	22.4
	No One	35.2	58.3	45.5	66.3
Did Trip Have Other Purpose	Yes	43.1	20.0	23.8	26.1
	No	56.9	80.0	76.2	73.9
What Was This Purpose	Visit Friends	52.0	55.0	53.3	46.3
	Business	4.0	10.0	13.3	25.9
	Other	44.0	35.0	33.3	27.8
How Long Was Trip (Days)	1	76.3	58.2	51.6	41.7
	2	6.8	20.9	24.2	25.0
	3	5.1	7.7	12.9	18.1
	4	1.7	5.5	1.6	7.9
	5-7	5.1	4.4	8.0	6.0
	8+	5.1	3.3	1.6	1.4

*Figures are per cent of those households taking fall trips with outdoor recreation within a given income category.

TABLE IV. 29

(42-4.22)

WINTER TRIPS BY INCOME OF HOUSEHOLD, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Distance to Site in Miles	0-24	38.2*	15.2	28.9	7.8
	25-49	17.6	10.6	10.5	6.2
	50-74	5.9	13.6	7.9	13.2
	75-99	2.9	7.6	5.3	23.2
	100-499	29.4	42.4	34.2	34.9
	500+	5.9	10.6	13.2	14.7
Was Site in N.C.	Yes	76.5	74.3	72.5	62.8
	No	23.5	25.7	27.5	37.2
Number of Other Sites Visited	0	94.1	92.2	81.6	81.4
	1-2	5.9	7.8	7.9	14.7
	3			7.9	3.9
	4				
	5				
	6+				
Means of Travel	Car	88.2	88.6	92.5	88.3
	Plane		8.6		4.4
	Train				
	Bus	2.9	1.4		
	Other	8.8	1.4	7.5	4.4
	Car & Other				2.9
Main Activity	Hunting	36.7	27.4	10.0	19.1
	Fishing	6.7	6.8	20.0	8.1
	Pleasure Driving	13.3	16.4	10.0	13.2
	Sightseeing	30.0	19.2	17.5	23.5
	Car Racing			7.5	
	Nature Walk		9.6	7.5	3.7
	Zoo			7.5	0.7
What Else Did You Do	Nothing	70.0	55.4	55.6	45.1
	Sightsee	10.0	32.3	13.9	24.8
	Shop		1.5	2.8	3.0
	Visit	6.7	1.5	11.1	
	Picnic			2.8	1.5
	Other	13.3	9.2	13.9	25.6

*Figures are per cent of those households taking winter trips with outdoor recreation within a given income category.

TABLE IV. 29 CONT.

(42-4.22)

WINTER TRIPS, 1971

Parameter		Household Income			
		$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
Was Place Profit Seeking	Yes	9.1*	25.7	15.4	31.8
	No	90.9	74.3	84.6	68.2
Who Went	Entire Family	58.8	50.0	48.8	68.6
	Husband/ Wife	32.4	46.8	34.1	25.5
	Parent/ Children	8.8	3.2	7.3	3.6
	Only Children			10.0	2.2
Who Else Went	Relatives	33.3	25.8	8.6	10.9
	Friends	9.1	24.2	20.0	17.1
	No One	57.6	50.0	71.4	72.1
Did Trip Have Other Purpose	Yes	52.9	44.3	32.5	41.2
	No	47.1	55.7	67.5	58.8
What Was This Purpose	Visit Friends	46.7	65.6	69.2	56.4
	Business	13.3	6.3	15.9	34.5
	Other	53.3	28.1	15.4	9.1
How Long Was Trip (Days)	1	70.6	41.7	56.4	32.6
	2	5.9	25.6	10.3	29.7
	3	5.9	6.9	7.7	12.3
	4	8.8	5.6	7.7	8.7
	5-7		12.6	5.2	13.7
	8+	8.8	8.4	12.8	2.8

*Figures are per cent of those households taking winter trips with outdoor recreation within a given income category.

In addition to an analysis by income of the household, an analysis of the survey results by race of household was conducted. The objective of such analysis was, of course, to determine the variance, if any, in non-vacation trip behavior that may be attributable to race.

Tables IV. 30 and IV. 31 present data regarding the number and length of non-vacation trips broken down by race. Tables IV. 32 and IV. 33 present an analysis by race of positive responses to certain parameters of the questionnaire. In all of the above mentioned tables, the figures are in terms of percentages of households within a certain category that responded affirmatively to a particular parameter for a particular season.

TABLE IV. 30

(42-4.22)

NUMBER AND LENGTH OF NON-VACATION TRIPS BY SEASON, 1971

Whites

% Taking No. Trips	Spring	Summer	Fall	Winter
0	69.1	47.3	57.5	72.0
1	13.6	16.8	20.8	13.5
2	6.5	9.2	7.1	4.7
3	2.8	9.6	4.3	1.9
4	1.6	2.3	2.8	1.4
5-8	2.4	4.5	3.1	2.4
9+	3.7	9.9	4.2	4.0
% Taking				
Day	13.0	25.1	20.2	13.7
Overnight	7.2	16.6	11.8	8.0
Short*	8.0	13.0	12.6	6.5
Long**	6.2	12.5	5.6	6.0
% on Weekends				
Day	70.9	84.7	79.6	80.1
Overnight	90.7	86.6	83.5	93.0
Short*	93.0	96.0	80.3	76.7
Long**	79.1	74.8	79.1	77.5
Avg. HH-days	2.224	2.554	4.603	2.028

* 2-3 nights
** 4 or more nights

TABLE IV. 31

(42-4.22)

NUMBER AND LENGTH OF NON-VACATION TRIPS BY SEASON, 1971

Non-Whites

% Taking No. Trips	Spring	Summer	Fall	Winter
0	78.4	63.4	75.9	83.9
1	10.8	17.9	12.5	8.0
2	2.7	7.1	1.8	1.8
3	0.9	5.4	1.8	2.7
4		0.9	1.8	
5+8	0.9	0.9	0.9	
9+	6.3	4.5	5.4	3.6
% Taking				
Day	14.8	20.9	16.5	12.2
Overnight	4.3	7.8	6.1	2.6
Short*	4.3	7.8	5.2	3.5
Long**	0.9	9.6	3.5	3.5
% on Weekends				
Day	64.0	60.9	74.7	72.7
Overnight	100.0	63.6	87.5	60.0
Short*	71.4	100.0	100.0	100.0
Long**	100.0	81.8	100.0	100.0
Avg. HH-days	1.15	2.17	1.89	1.51

* 2-3 nights
** 4 or more nights

TABLE IV. 32

(42-4.22)

SPRING AND SUMMER RECREATION TRIPS BY
RACE OF HOUSEHOLD, 1971

Parameter		Spring		Summer	
		% White	% Non-White	% White	% Non-White
Distance to Site in Miles	0-24	14.5	47.4	13.9	35.6
	25-49	11.7	10.5	13.7	6.8
	50-74	12.4	5.3	12.2	5.5
	75-99	9.2	5.3	10.8	8.2
	100-499	44.2	21.1	40.8	37.0
	500+	8.1	10.5	8.6	6.8
Was Site In N. C.	Yes	63.8	81.6	69.3	68.9
	No	36.2	18.4	30.7	31.1
Number of Other Sites Visited	0	89.0	83.3	82.9	76.8
	1-2	8.8	16.7	14.1	20.3
	3	1.8		19.0	2.9
	4	0.4		0.5	
	5			0.2	
	6+			0.3	
Means of Travel	Car	90.6	67.6	94.5	85.1
	Plane	2.8	13.5	2.1	6.8
	Train		2.7	0.2	
	Bus	0.7	5.4	0.6	4.1
	Other	5.6	10.8	1.6	4.1
	Car & Other	0.3		1.0	
Main Activity	Fishing	16.7	42.1	13.4	21.9
	Swimming-(Not Pool)	8.0		20.2	12.3
	Nature Walk	6.6	2.6	5.0	
	Picnicking	3.1	2.6	7.0	8.2
	Camping	4.9	2.6	7.5	1.4
	Pleasure Driving	8.7	10.5	8.8	12.3
	Sightseeing	20.2	15.8	16.9	19.2
	Visit Zoo	0.3	7.9	0.5	2.7

TABLE IV. 32 (Cont.)

(42-4.22)

Parameter		Spring		Summer	
		%White	% Non-White	% White	% Non-White
What Else Did You Do	Nothing	44.7	61.1	30.3	38.6
	Sightsee	18.9	22.2	18.6	28.6
	Shop	1.5	2.8	0.7	2.9
	Visit	1.1	2.8	1.2	1.4
	Picnic	7.2		11.7	5.7
	Other	26.5	11.1	37.6	22.9
Was Place Profit Seeking	Yes	28.5	20.5	35.5	29.7
	No	71.5	79.5	64.5	70.3
Who Went	Entire Family	63.0	51.4	72.6	62.2
	Husband/ Wife	29.3	29.7	17.9	27.0
	Parent/ Children	6.2	10.8	6.4	1.4
	Only Children	1.5	8.1	3.1	9.5
Who Else Went	Relatives	14.7	2.9	16.4	10.0
	Friends	24.5	28.7	23.1	20.0
	No One	60.9	68.6	60.5	70.0
Did Trip Have Other Purpose	Yes	30.4	28.2	18.8	29.7
	No	69.6	71.8	81.2	70.3
What Was This Purpose	Visit Friends	44.2	66.7	46.5	63.6
	Business	15.1	25.0	12.3	9.1
	Other	40.7	8.3	41.2	27.3
How Long Was Trip	1	43.4	74.4	44.6	65.8
	2	23.1	5.1	21.0	11.0
	3	15.5	7.7	15.6	8.2
	4	5.2	2.6	3.4	1.4
	5-7	9.6	7.7	9.6	5.5
	8+	3.1	2.6	5.9	8.2

TABLE IV. 33

(42-4.22)

FALL AND WINTER RECREATION TRIPS BY
RACE OF HOUSEHOLD, 1971

Parameter		Fall		Winter	
		% White	% Non-White	% White	% Non-White
Distance to Site in Miles	0-24	11.1	47.8	13.6	44.1
	25-49	16.1	10.9	9.8	2.9
	50-74	15.8		11.7	11.8
	75-99	10.9	6.5	14.4	8.8
	100-499	39.4	21.7	37.1	29.4
	500+	6.7	13.0	13.3	2.9
Was Site in N. C.	Yes	71.5	72.3	66.9	82.9
	No	28.5	27.7	33.1	17.1
Number of Other Sites Visited	0	80.8	84.1	85.3	90.9
	1-2	16.7	11.4	11.7	6.1
	3	1.3	4.5	2.6	3.0
	4	0.5			
	5	0.5			
	6+	0.3		0.4	
Means of Travel	Car	93.2	74.5	90.0	74.3
	Plane	1.4	6.4	4.3	
	Train	0.2			
	Bus	1.4	4.3	0.4	5.7
	Other	2.8	14.9	3.9	20.0
	Car & Other	0.9		1.4	
Main Activity	Hunting	7.9	8.9	18.8	23.5
	Fishing	13.8	26.7	9.6	11.8
	Pleasure Driving	12.6	8.9	14.5	14.7
	Sightseeing	18.3	13.3	22.7	23.5
	Nature Walking	8.1		5.0	2.9
	Snow Skiing			5.3	
	Picnicking	7.9	6.7	0.4	
	Camping	5.5	4.4	1.8	

TABLE IV. 33 (Cont.)

(42-4.22)

Parameter		Fall		Winter	
		% White	% Non White	% White	% Non White
What Else Did You Do	Nothing	40.5	54.5	52.2	61.3
	Sightsee	23.3	9.1	23.5	22.6
	Shop	2.0	4.5	1.9	3.2
	Visit	2.3	6.8	1.9	6.4
	Picnic	8.1	9.1	2.2	
	Other	23.8	15.9	18.3	6.4
Was Place Profit Seeking	Yes	29.4	10.6	26.9	8.8
	No	70.6	89.4	73.1	91.2
Who Went	Entire Family	64.2	31.9	62.0	54.3
	Husband/ Wife	26.7	46.8	32.5	22.9
	Parent/ Children	7.5	10.6	4.0	11.4
	Only Children	1.1	10.6	1.5	11.4
Who Else Went	Relatives	16.3	6.8	15.9	13.3
	Friends	26.0	29.6	19.7	13.3
	No One	57.8	76.1	69.4	73.3
Did Trip Have Other Purpose	Yes	25.4	23.9	42.9	42.9
	No	74.6	76.1	57.1	57.1
What Was This Purpose	Visit Friends	48.6	66.7	60.0	57.1
	Business	16.8	16.7	20.8	14.3
	Other	34.6	16.7	19.2	28.6
How Long Was Trip Days	1	48.6	68.1	41.6	67.6
	2	23.6	8.5	23.5	8.8
	3	14.2	6.4	11.7	
	4	5.9	4.3	7.1	5.9
	5-7	5.4	8.5	11.0	
	8+	2.4	4.3	5.0	17.6

Factors Affecting Demand

It was stated at the outset of this chapter that one principle of outdoor recreation demand is that, given the opportunity, the majority of people will engage in some form of outdoor recreation activity. The key to this principle is the word opportunity. Opportunity to engage in recreation can be viewed in regard to several types of individual characteristics. Since recreation is an individual matter, its occurrence may depend upon factors of age, sex, education, income and available leisure time as they apply to an individual.

It therefore must be deduced that given levels of participation in recreation are the result of the presence or absence of certain barriers. This concept is one of utmost interest to the contemporary recreator and social scientist. The delineation of these barriers and their effect upon recreation participation has been and continues to be the subject of much research. To date, these efforts have revealed that the primary areas of constraint upon the individual's recreation behavior are in terms of the skill or physical energy required by a particular activity, the amount of financial resources necessary for participation, the amount of available free time required for an enjoyable experience, and the proximity of the activity resource to the individual (accessibility and availability).

Since most of these barriers can be measured in terms of socio-economic characteristics, the household survey of demand gathered such information along with information on participation so that any discrepancies in behavior among individuals of different socio-economic characteristics could be noted. For example, the age of an individual gives some indication of the physiological condition and adroitness that can likely be ascribed to him. In addition, age in conjunction with other factors can give a reasonable reflection of a person's station in life and thus infer certain constraints and barriers that may be characteristic of this "station". It has been shown in several studies, for example, that the restrictions on young couples imposed by parenthood do have a distinct effect upon the amount of recreation in which they engage.

Socioeconomic Characteristics — 42-5.10

The major socioeconomic characteristics with which the North Carolina household survey of recreation demand dealt were those of income and race. Data pertaining to these factors are the most accessible and reliable for purposes of analyzing variances in particular types of behavior; in this case recreation behavior.

It is felt that factors of age and sex and their effect upon recreation behavior in North Carolina will not vary significantly from the effect measured in national and regional recreation participation studies. Considerable economy in the analysis of the household survey was realized through the omission of an in-depth analysis of these factors.

Another factor that was subdued through the analysis of the survey results was that of education. The rationale for this was the principle that personal income is a reasonable indicator of educational attainment.

Nevertheless, it must be pointed out that the base data pertaining to these parameters was gathered on the original survey questionnaires. Should the need for the analysis of the survey according to parameters other than income and race ever become evident, the potential applicability of the base data exists.

Income — 42-5.11

The variance in activity participation due to household income has been discussed, by activity, in preceding sections of this chapter. The information presented there is summarized in Table IV. 34. In the interest of brevity, the data presented in this table will not be discussed in detail here. However, it should be noticed that many positive linear relationships between activity participation and household income level exist.

TABLE IV. 34

(42-5.11)

PER CENT OF HOUSEHOLDS PARTICIPATING BY INCOME, 1971

Activity	Household Income			
	$0-4,000	$4,000-7,500	$7,500-10,000	$10,000+
Hunting	13.3	29.5	32.3	30.5
Fishing	28.9	51.7	52.1	53.8
Swimming-Pool	5.9	22.8	31.3	55.7
Swimming-Other	8.9	32.9	38.5	52.9
Canoe-Exercise		2.7		4.8
Canoeing-Scenery		1.3	1.0	3.3
Hiking-Pack		3.4	3.1	5.7
Nature Walk	23.7	32.2	28.1	35.7
Bird Watch	5.2	12.8	13.5	11.9
Picnicking	24.4	48.3	51.0	65.2
Camping	6.7	18.8	17.8	32.9
Biking	0.7	10.7	9.4	24.3
Rock Hunt	1.5	3.4	3.1	9.0
Sailing		0.7	2.1	5.2
Power Boat	5.2	13.4	14.6	23.3
Golf	4.4	12.1	11.5	32.9
Tennis	3.0	8.1	11.5	21.4
Play otdr. games	11.9	28.9	22.9	34.3
View otdr. games	17.8	35.6	31.3	46.2
Water Ski	0.7	6.7	8.3	16.7
Snow Ski		4.0		8.1
Ice Skate	0.7	3.4	6.3	10.0
Trap Shoot		2.0	4.2	4.3
Archery	1.5	4.7	5.2	3.3
Target Shoot	3.0	11.4	12.5	11.9
Horseback Riding	2.2	9.4	7.3	11.9
Wildlife Photo		2.0	4.2	4.8
Mountain Climb	3.7	9.4	8.3	11.0
Show Horses		2.0	4.2	2.9
Pleasure Driving	39.3	67.8	66.7	67.6
Sightseeing	38.5	61.1	59.4	63.8
Outdoor Drama	1.5	9.4	10.4	20.0
Historic	8.9	28.9	32.3	42.9
Cultural	1.5	8.7	19.8	24.3
Zoo	9.6	20.1	18.8	25.7

For some activities the slope of this relationship is very pronounced and greater in magnitude than for others. For others, the slope may be greatest between the two lowest adjacent income categories and then almost zero between the three highest income categories.

Regardless of these relationships, however, one fact seems evident. Those activities in which barriers of high costs or investments of financial resources are minimal are engaged in by more households in all income categories.

Similar relationships were found to exist in the behavior of North Carolina households on vacations. The higher the income of the household, the greater the probability that they would take a vacation.

As could be expected, the effect of income upon vacation behavior was quite similar to the effect of household income upon non-vacation trip behavior.

These very cursory observations lead to some important implications about the provision of recreation opportunities. The acquisition and development of new recreation areas should be planned with consideration of the income levels of the market area population. A thorough understanding of these conditions will preclude the provision of facilities for activities that are prohibitively expensive. On the other hand, should such facilities either already exist or be provided regardless of the incomes of the users, provisions to limit the financial barriers to participation should be considered.

These factors will apply particularly in North Carolina's urban areas where there are concentrations of low-income populations. In order to achieve the objective of providing a variety of facilities for all people, urban area recreation programs must have the financial resources to "subsidize" the recreation pursuits of the poor.

Income analysis of the market area of a proposed facility is also good business for those interested in developing resort facilities for the above-average income classes. Anticipated usage is of prime interest to these developers and the base data provided herein should aid in an approximation of usage.

Race 42-5.12

No analysis of activity participation by race of household was conducted.

Vacation trip behavior by race is summarized in Table IV. 16. At present there exists a noticeable disparity between white and non-white vacation behavior in terms of percentage of households in each category participating. Non-white take vacations at about half the rate of whites.

Non-vacation trip behavior by race closely parallels that of vacation behavior and is reflected in Tables IV. 30 and IV. 31.

As with income, the implications of this analysis indicate that there is a significant difference in the recreation behavior of people of different races. Consideration of the racial composition of the market area for a recreation site is therefore indicated in determining development and programs needed.

Availability of Resources 42-5.20

The household survey of recreation demand in North Carolina included a consideration of the attitudes of the respondents relative to the adequacy of recreation areas and facilities in the State. The question was phrased in the context of age groups of users and the respondent was asked to indicate whether or not he felt that the recreation opportunities in the State for that age group were satisfactory. The summary tabulation of those responses are presented by income and race in Table IV. 35.

Taking all households into consideration, the age groups that North Carolinians feel are most neglected in the provision of recreation opportunities are the ages 13 to 19 years, 65 years and over, and 1 to 12 years in that order. However, it is also important to note that over 35% of the households sampled felt that recreation opportunities for the remaining age groups of 20 to 44 years and 45 to 64 years were not satisfactory. Less than 19% of the sample felt that the recreation opportunities for any one age group are very satisfactory.

These factors echo a feeling of the citizenry about the adequacy of recreation areas in the State. The interesting question then becomes just how would changes in the status quo affect the amount of recreation participation by North Carolinians. In addition to increased availability of resources, the respondents were asked what effect increased income, increased leisure time, and improvements at existing facilities would have upon their level of participation (demand).

The results of these questions are presented in Tables IV. 36 and IV. 37. The overwhelming conclusion of the analysis is that people in the State feel that nearer facilities with easier access would be the one change that would most increase their participation. Therefore, it must be deduced that provision of areas accordingly will result in increased demand--a positive effect determined by the availability of resources.

To complement the information gathered regarding the degree of satisfaction about recreation facilities expressed by State residents, survey respondents were asked to indicate the types of recreation activities that they felt the State should provide. These results, in terms of percentage of households responding per activity, are presented in Table IV. 38 by income category. The "activity" receiving the most support was visiting a zoo. This feeling was apparently born out in the passage of the bond referendum to raise funds for the creation of the North Carolina Zoological Park.

TABLE IV. 35

(42-5.2)

ATTITUDES REGARDING ADEQUACY OF EXISTING OUTDOOR RECREATION OPPORTUNITIES FOR CERTAIN AGE GROUPS BY INCOME AND RACE, 1971

Age Group/ Attitude	Household Income				Race	
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+	White	Non-White
Young Children 1-12						
Very Satisfactory	20.9*	15.5	9.5	15.8	15.2	14.6
Somewhat Satisfactory	33.0	32.7	45.9	39.0	39.1	29.2
Not Very Satisfactory	46.6	51.8	44.6	45.2	45.7	56.2
Teen-Age 13-19						
Very Satisfactory	19.8	13.1	11.8	15.0	14.3	12.8
Somewhat Satisfactory	30.2	30.8	27.6	36.1	35.1	26.7
Not Very Satisfactory	50.0	56.0	60.5	48.9	50.6	60.5
Young Adult 20-44						
Very Satisfactory	20.0	18.4	16.2	18.2	17.5	16.3
Somewhat Satisfactory	40.0	42.1	48.7	52.6	49.3	36.0
Not Very Satisfactory	40.0	39.5	35.0	29.2	33.2	47.7
Middle-Age Adult 45-64						
Very Satisfactory	19.0	20.0	16.2	20.6	18.9	17.7
Somewhat Satisfactory	35.7	41.8	41.2	49.7	45.7	34.2
Not Very Satisfactory	45.2	38.2	42.6	29.7	35.5	48.1
Older Persons 65+						
Very Satisfactory	19.8	17.5	10.8	16.8	15.3	18.2
Somewhat Satisfactory	30.2	30.1	29.2	39.4	34.7	35.1
Not Very Satisfactory	50.0	52.5	60.0	43.9	50.0	46.8

* * * Summary * * *

Age	Very Satisfactory	Somewhat	Not Very Satisfactory
1-12	14.9	37.6	47.3
13-19	14.2	33.6	51.8
20-44	17.1	46.7	36.1
45-64	18.5	43.8	37.4
65+	16.0	34.5	49.1

*Figures are per cent of households responding per category.

TABLE IV. 36

(42-5.2)

PERCEIVED CHANGES IN PARTICIPATION BY VARIOUS FACTORS, 1971

Factor	Effect on Participation			
	Much More	Little More	Same	Less
More Income	25.5*	29.7	44.0	0.9
More Leisure Time	35.4	28.1	36.5	
Improved Facilities	15.6	34.3	49.9	0.3
Nearer-Easier Access	31.4	36.9	31.3	0.4

* * * Summary * **

What One Change Would Most Affect Your Outdoor Recreation Participation

Facilities Nearer-Easier Access	37.1
More Leisure Time	28.6
Higher Income	23.1
Improved Facilities	6.8
Nothing	4.5

*Figures are per cent of households responding per category.

TABLE IV. 37

(42-5.2)

RECREATION ATTITUDES BY INCOME AND RACE, 1971

Consideration and	Effect	Household Income				Race	
		$-3,999	$4,000-7,499	$7,500-9,999	$10,000+	White	Non-White
If You Had	Participation Would Be						
Higher Income	Much More	27.4*	36.9	21.3	23.7	25.1	25.7
	Little More	28.2	27.7	30.9	28.5	27.6	38.5
	Same	41.9	35.5	47.9	46.9	46.4	34.9
	Less	2.6			1.0	1.0	0.9
More Leisure Time	Much More	12.8	36.6	37.9	49.8	37.6	22.9
	Little More	17.9	33.1	29.5	28.7	28.0	28.4
	Same	69.2	30.3	32.6	21.5	34.4	48.6
Improved Facilities	Much More	12.2	19.0	17.4	15.4	14.5	17.3
	Little More	24.3	31.4	33.7	38.9	33.4	39.4
	Same	63.5	49.6	48.9	45.7	51.9	42.3
	Less					0.2	1.0
Improved Access	Much More	29.6	37.6	37.2	28.4	30.2	35.8
	Little More	26.1	36.9	35.1	41.4	37.3	35.8
	Same	42.6	25.5	27.7	30.5	32.1	27.4
	Less	1.7			0.5	0.4	0.9
What One Change Would Have Most Effect.....	Higher Income	36.4	29.6	10.6	17.2	19.7	38.9
	Leisure Time	5.0	22.5	37.2	48.0	33.0	9.3
	Improved Facilities	4.1	8.5	9.6	5.9	5.9	8.3
	Improved Access	40.5	36.6	40.4	27.5	35.9	42.6
	Nothing	14.0	2.8	2.1	1.5	5.4	0.9
How Would You Rank Outdoor Recreation Among State Needs...	Urgent	16.0	20.6	22.1	17.6	19.0	19.2
	Important	66.0	63.2	62.1	68.8	66.3	60.6
	Not Important	17.9	16.2	15.8	13.7	14.7	20.2

*Figures are per cent of households responding per category

TABLE IV. 38

(42-5.20)

ATTITUDES REGARDING STATE PROVISION
OF OUTDOOR RECREATION ACTIVITIES, 1971

Consideration	Household Income			
	$0-3,999	$4,000-7,499	$7,500-9,999	$10,000+
What Type of Outdoor Recreation Facilities Should N.C. State Government Provide....				
Hunting	1.5	2.7	3.1	1.0
Fishing	3.0	8.1	4.2	4.3
Swimming-Pool	8.1	10.7	9.4	15.2
Swimming-Other	1.5	1.3	2.1	4.3
Canoeing		0.7	2.0	1.0
Hiking-Pack	0.7	1.3		2.0
Nature Walking				1.5
Picnicking	8.1	5.4	11.5	10.0
Camping	5.2	8.1	5.2	11.9
Biking		1.3		1.9
Rock Hunting		0.7		
Sailing		0.7		1.0
Power Boating	1.5	0.7	1.0	1.5
Golf	0.7	1.3		3.8
Tennis	3.7	2.7	6.2	4.8
Play Outdoor Games	4.4	2.0	1.0	0.5
View Outdoor Games		0.7		0.5
Water Ski				1.0
Snow Ski	0.7	0.7		1.4
Sledding	0.7	0.7	2.1	1.4
Archery			1.0	
Horseback Riding Trails	3.0	2.0	5.2	2.0
Wildlife Photography	0.7			
Mountain Climbing				0.5
Pleasure Driving		0.7	1.0	
Sightseeing	0.7	1.3	1.0	
Outdoor Dramas		1.3	5.2	4.3
Historic Sites	0.7	2.7	2.1	3.3
Cultural Exhibits		2.7	4.2	3.3
Zoo	11.1	16.1	17.7	27.1
Water Activities	2.2	2.0	4.2	4.3
Parks	23.7	20.1	24.0	19.0
Other	13.3	14.8	14.6	7.1
None	6.7	2.7	2.1	3.3
How Should These Facilities Be Paid For				
Taxes	11.1	16.8	17.7	14.8
Users	18.5	15.4	21.9	21.0
Both	41.5	45.6	49.0	51.4
No Opinion	28.9	22.1	11.5	12.9

Adds to more than 100% due to multiple responses.

User Fees and Charges 42-5.30

The respondents' sentiment toward financing the provision of these additional activities by the State seemed to indicate a preference for joint financing through both taxes and user fees. A breakdown of these responses by income category also appears in Table IV. 38.

The effect of user fees and charges upon outdoor recreation demand was accounted for in the household survey questionnaire by asking whether or not the primary recreation site visited on trips was profit seeking. This was judged to be an indicator of the existence of user fees and charges at the site.

Generally, North Carolina households expressed a preference for non-profit-type recreation areas on vacation trips and non-vacation trips. This ratio ranged from about 60% to 90% of the households responding preferring recreation areas that were non-profit in nature. As could be expected, there was noticeable variance in the responses to this question among households of different incomes and race. The tables in preceding sections of this chapter dealing with the relationship of income and race to various trip parameters give a detailed breakdown in percentage of households responding in each category of operator type.

Alternative Arrangements 42-5.40

Changes in the present status of the manner in which recreation opportunities are provided are referred to as alternative arrangements. The effect of these changes upon the level of outdoor recreation demand is of interest to recreation planners and administrators. The accurate delineation of these effects will aid in the efficient planning and administration of future recreation resources.

The scope of the demand study related in this chapter was not such that an in depth analysis of possible effects of possible future conditions could be conducted. However, there are general conclusions that can be reached regarding alternative arrangements based upon the results of the survey. There usefulness lies in pointing out the qualitative aspects of possible effects upon demand generated by so-called alternative arrangements. No attempt has been made to quantify these effects.

One type of alternative arrangement can be defined in terms of resource limitations. This concept is based upon the fact that certain types of outdoor recreation pursuits require a kind of resource that is available only in certain locations. For example, swimming in the surf is an activity precluded by the absence of ocean frontage exposed to the tidal effects of waves. Similarly, mountain climbing necessitates the availability of mountainous features for its occurrence.

Generally, alternative arrangements of resources cannot be accomplished by physically moving the resource. However, substitutes for these resources in locations where they are absent and improved access to areas where they exist are feasible alternative arrangements. The results of the household survey of demand indicate the participation will increase where these types of alternative arrangements occur. One vivid example of this phenomena can be seen in the expansion of the winter snow skiing activity in North Carolina; the resources for which were thought to be "nonexistent" a mere decade ago.

Another type of alternative arrangement can be thought of in terms of the type of operator that manages the recreation resource. There are three basic types of recreation area operators; public, private, and commercial. Each of these types have their own characteristics of operation and management; some of which act as limiting factors on participation at their areas for some segments of the population.

Alternative arrangements, then, would involve the shifting or relaxing of these limitations by changes in the type of operator for certain facilities. Other types of changes could be introduced by altering the management policies of particular recreation area operators.

Generally, wherever the substance of such changes results in a lessening of barriers to participation, there will be an increase in recreation demand. Conversely, where such changes increase barriers, demand will decrease. One very good example of this type of alternative arrangement in North Carolina can be seen in the creation of the North Carolina Game Lands Program. This program more than doubled the amount of land controlled by the North Carolina Wildlife Resources Commission by conveying control to the commission of lands that had previously been under the control of other types of "operators". It reduced participation barriers for certain types of hunting on lands where limitation previously existed and thus resulted in an increase in hunting on these lands.

Table IV.37 lists the results of the household survey in terms of other types of alternative arrangements. The respondents were asked how increases in certain personal "assets" might affect their participation in recreation activities. The assets of greatest interest in the context of alternative arrangements were "higher income" and "increased leisure time." These are two changes that are presently occurring in practically all segments of American society and therefore the effect they will have on recreation demand should be considered.

Since actual effect will have to wait the passage of time to be accurately measured, the best indication that is presently available is the population's perception of how alternative arrangements in levels of income and leisure time could affect their participation

in recreation activity. As measured in the survey, increased income will result in no increase in participation for about 43% of North Carolinians according to their present feelings. About 28% will participate "a little more" and about the same amount will participate "much more."

The interesting point as revealed in Table IV. 37 is the difference in affect of increased income among various levels of existing income. The majority of households in all income categories except the $4,000 to $7,499 category felt that higher income would have no effect on their participation.

Increased leisure time, according to the survey, would result in "much more" participation for about 35% of the households in the State with the magnitude of the effect increasing the higher the present level of income is.

Positive changes in these factors will then result in increases in recreation demand assuming that the population's future behavior closely approximates their present perceptions.

It becomes evident, then, that few conceivable alternative arrangements in the context presented here will result in a decrease in recreation demand; a conclusion that stresses the necessity of adequate recreation planning for the future.

Impact of Nonresidents 42-5.50

As part of the current State recreation planning effort, a survey of out-of-state visitors to North Carolina was conducted. The basic purpose of this study was to gauge the volume of the influx as well as to gain information about significant characteristics of the visitors. Although many of the specific goals of the study were only marginally met, some expressions about out-of-state visitors were gathered.

It was found that the impact of out-of-state visitors to the State varied considerably. Some of the municipally operated sites attracted no out-of-state visitors at all. On the other hand, federal and some better known State sites had well over half of their patronage from outside the State.

Visitors were asked where they were from. Nearly 40% were from the contiguous states of Virginia, South Carolina, Georgia and Tennessee in decreasing order of magnitude. The remaining southeastern states contributed 24% of the visitors. The Mid-East states stood next with about one-sixth of all visitors. Another significant source of visitors was the Great Lakes area which supplied just over one-tenth of the visitors. The western states provided 7.4% of all visitors and New England provided 1.8%.

The Piedmont sites had more visitors from South Carolina than the remainder of the general sample. The Coastal Region had a heavier representation from the Mid-East, Virginia and the Great Lakes in decreasing order. (see Table IV. 39)

More of the visitors to the State entered from the South than from any other direction. Visitors from the West were second and visitors from the North were third.

A key factor in evaluating the impact of out-of-state visitors is the length of their stay in the State. The biggest group planned to stay two or three nights. The next three categories of duration of visit in the State were not significantly different (about 19%). These were one day, four to six days, and seven days. Over four-fifths of the visitors planned to stay one week or less. On the other hand, over 10% of the visitors planned to stay more than two weeks.

Approximately 70% of North Carolina's visitors return directly to home when they leave the State. The other 30% have other destinations in mind after departure. This indicates that for many

visitors stops in North Carolina were not the only purpose of the trip. This is particularly true since many of the people returning home from North Carolina had been other places and this State was not their main destination.

Although there were large numbers of persons staying in the State for several days, few stayed more than one day at any one place. This varied with the type of site. The campgrounds surveyed reached a percentage of 50% staying for four or more nights.

The discrepancy between length of stay at the site and in the State is explained by the fact that over 60% of all parties planned to visit other North Carolina sites. The tendency to visit other sites was weakest in the Piedmont, but even in that region it approached nearly 50%.

Fully 40% of the sample indicated they would spend $100 or more in this State on their visit. An additional one-fifth spent between $50 and $100. Another fifth, however, spent less than $25.

Fully one quarter of the parties surveyed had a camper. Slightly over 1% of the parties had a boat.

The above summary information along with that presented in Tables IV. 39, IV. 40, and IV. 41 gives an idea of the impact of out-of-state visitors to North Carolina.

Another question raised by the above study was whether or not North Carolina is a net "importer" or "exporter" of recreation demand in terms of visitor days. In order to answer this, it was necessary to determine the amount of recreation demand generated by North Carolinians in other states and compare this figure to the estimated quantity of recreation demand in the State generated by persons residing in other states.

This process was carried out and the results are presented in Table IV. 42. Generally it was determined that North Carolina provides more days of recreation demand to other states than other states provide to North Carolina.

One causative factor for this has been hypothesized to be the configuration of the State's borders. Being rather elongated in shape, many residents find recreation attractions in other states more accessible due simply to geography. For example, the populous Piedmont section is as close or closer to beaches in South Carolina than it is to beaches in North Carolina. The fact that many state residents go to South Carolina beaches was borne out in the household survey of recreation demand.

TABLE IV. 39

(42-5.50)

ORIGIN OF OUT-OF-STATE VISITORS AT
SELECTED NORTH CAROLINA SITES, 1971

State of Origin	Destination			
	Mountain	Piedmont	Coastal	N. C. Total
Georgia	12.60	4.07	2.35	8.46
South Carolina	11.81	17.89	8.24	12.02
Tennessee	6.82	2.44	1.76	4.75
Virginia	7.35	16.26	26.47	13.80
Balance Southeast	31.76	25.20	5.88	24.04
New England	0.79	0.81	4.71	1.78
Mid-East	13.12	12.20	27.65	16.62
Great Lakes	11.02	8.94	11.76	10.83
Other	4.72	12.19	11.18	7.72

TABLE IV. 40

(42-5.50)

LENGTH OF STAY IN NORTH CAROLINA;
OUT-OF-STATE VISITORS, 1971

Duration of Visit	Destination			
	Mountain	Piedmont	Coastal	N. C. Total
One Day	14.70	28.26	12.94	18.69
2 - 3 Days	32.02	21.74	27.65	28.49
4 - 6 Days	21.52	14.13	16.47	18.69
7 Days	20.47	17.39	18.82	18.84
8 - 13 Days	3.41	2.17	4.71	3.41
14+ Days	7.35	16.30	18.82	11.28
Not Reported	0.52		.59	.60

The following table shows the percentage of parties planning to engage in various activities while in the State.

TABLE IV. 41

(42-5.50)

RECREATION ACTIVITIES OF OUT-OF-STATE VISITORS, 1971

Activity	Destination			
	N.C. Total	Mountain	Piedmont	Coastal
Picnicking	43.8	39.9	55.4	48.2
View Historic Sites	52.4	43.3	47.8	68.8
Golf	5.6	3.7	13.0	7.1
Visiting Zoo	11.3	11.8	9.8	10.6
Tennis	5.9	3.7	13.0	8.2
Camping	42.0	38.9	43.5	51.2
Swimming	39.6	29.4	39.1	65.9
Cultural Exhibits	23.3	19.4	21.7	28.8
Wildlife Photography	23.3	27.6	10.9	20.0
Hiking	32.4	34.7	29.4	29.4
Outdoor Dramas	20.2	22.1	15.2	18.8
Viewing Outdoor Games	7.6	7.9	12.0	3.5
Fishing	23.9	17.3	27.2	39.4
Sightseeing	70.6	68.2	67.4	74.1
Other	8.2	7.4	7.6	11.2

Note: The data adds to more than 100% since most respondents checked more than one activity.

TABLE IV. 42

(42-5.50)

ADULT VISITOR DAYS DEMAND IN THOUSANDS, 1971 AND PROJECTED

	1971	1976	1986	2020
North Carolinians in Other States	17,300	20,100	30,450	77,900
Non-North Carolinians in North Carolina	6,675	7,375	9,170	19,061
Net Deficit on Basis of Present Trends	10,625	12,725	21,280	58,839

Technological Advances 42-5.60

Technology is the password to the future. On practically all fronts of contemporary American society technological advances are occurring at unprecedented rates. It obviously is not within the scope of this plan to delve into all of these areas of technology.

It is, however, important for recreation planners to understand the technological advances that may have a potential impact on recreation demand. It is stressed that negative impact is of equal interest to the planner as positive impact. Technological developments that hinder the provision of recreation opportunities are of equal if not more importance than those which enhance recreation opportunities.

There are four major areas of technology in which developments may have potential implications for future recreation demand. They are: transportation; recreation support equipment and facilities; health and safety; environmental resources management.

The area of transportation encompasses technological advances that most assuredly have had and will continue to have great influence upon recreation demand. With the advent of the automobile Americans have come to know a degree of mobility never before experienced by so many people.

The major implications of advances in transportation in relation to recreation demand have both positive and negative elements. On the negative side, there are presently barriers being placed between people and recreation resources due to developments in transportation. The freeway and interstate highway, ironically, have in some instances severed means of access between parks and people. As a result of the National Environmental Policy Act of 1969, many of these negative effects upon recreation demand caused by automobile transportation developments are being alleviated.

The positive effect of transportation advances is revealed by the greater access provided to some recreation resources. As this access continues to improve, a corresponding increase in recreation demand can be expected. However, improved access must not be thought of entirely within the context of automobiles. Transportation planners are at least beginning to see the potential benefits of complex mass transit systems and concerted efforts at researching the feasibility of such systems is under way. The potential impact of such systems on recreation demand is twofold. Not only will such systems improve access to recreation resources, particularly within urban areas, they will perhaps also lessen the need for providing vast acreages of automobile parking spaces within the recreation area. The latter effect could obviously improve the capacity of the area.

While the technological advances in transportation will have a somewhat indirect effect upon recreation demand, the advances in technology related to the recreation support equipment and facilities industry will have a very direct and marked effect. These developments have already exhibited the dynamic forces which they direct upon recreation demand by the increased popularity of snowmobiles, self-contained campers, and powered boats.

Although many advances in this field are felt by some to have negatively influenced recreation demand, the argument is usually in terms of quality and not quantity. Most of the "real" advances in the field, excluding the novel, exotic, and faddish, have resulted in increased levels of demand. An oft-cited example in North Carolina is the increase, even creation, of demand for snow skiing brought about by developments in artificial snow-making equipment.

The challenge to recreation planners will be to stay abreast of these developments and be able to distinguish the fads from the harbingers of significant future recreation opportunities.

Technological advances in the areas of health and safety also have indirect implications for recreation demand. The advances in medical science of this century have significantly increased the life expectancy of the average individual as well as reduced the infant mortality rate. These two phenomena are of course major contributors to the current pressures of population growth.

The major implications for recreation demand are that for the foreseeable future there will be increasing numbers of people in the under twenty-five and over sixty age group and thus, by all indications, increasing demand.

The field of environmental resources management is not new. Man has always exercised some control over his environment. The technological advances in the area of positive environmental management, however, have mostly come about during the last half century. Positive environmental management simply means that man lives in harmony, to the maximum degree, with his environment. Through it man realizes his dependency upon the limited resources of that environment and seeks to maximize wise use and minimize degradation.

Most of the advances in this field have come in two general areas. The first is the area of environmental reconnaissance; inventorying the existing characteristics of the environment so that environmental dynamics can be gauged. The second is the area of management of certain environmental characteristics in a manner that produces a desired effect.

The impact upon recreation demand by advances in environmental reconnaissance will be largely remote and indirect. To the degree that such developments contribute to man's capability for managing quality recreation resources, they will have a positive impact on demand. The same rationale applies to the advances in management of environmental characteristics. The maximization of quality and the minimization of degradation of resources will have an overall effect of increasing both the quantity of demand and the quality of the recreation experience.

From the preceding discussion of technological advances it becomes clear that recreation planners and administrators must be aware of new developments in many fields. They must then analyze the possible implications of the developments in terms of their potential effect on the provision of satisfying recreation opportunities. Advances that enhance these opportunities should therefore be supported and "advances" that hinder them should be resisted.

Environmental Quality 42-5.70

The growing concern for environmental quality is accompanied by an evolution of many related concepts, policies, and practices all aimed at providing a means for improving the quality of living. The genesis of this concern involved only a few scientists and concerned citizens but it has now expanded to include large numbers of people in all walks of life. Much of the involvement has been on a high emotional plane and the separation of fact from fiction has been difficult. The major concern of recreation and recreators should be to contribute to: solutions to environmental quality problems, elimination of practices in recreation areas that cause environmental damage, and the operation of recreation areas in such a manner that they serve as positive examples of proper and reasonable use of natural resources.

From the great mass of discussion to date, it is now clear that protection and improvement of the environment will receive high priority consideration at all levels of government. To facilitate further discussion of environmental quality and its effect upon recreation demand, it is necessary at this point to list the major characteristics or parameters of environmental quality of significance to recreation. They are: quality of water, air and land; aesthetics; safety and health; preservation of historical, cultural, and natural aspects of our heritage.

The quality of water, air, and land, particularly that comprising recreation resources, has an effect upon recreation demand. Although many aspects of quality in these characteristics of water, air, and land have direct implications for aesthetics, health, and safety, it is the combined level of quality in all three that is a major determinant of the degree of satisfaction an individual derives through recreation. It has been shown through experience that when parks become run down and neglected there is a decrease in attendance; and, those that do use the facility tend to perpetuate the degrading conditions. On the other hand, facilities that exemplify quality of water, air, and land tend to attract larger numbers of users who are more appreciative of the facility.

Aesthetics in the environment affect demand similarly to the general quality of water, air, and land features. One axiom of animal behavior, including humans, is that individuals of the species tend to seek out places in which they are comfortable. For humans, an element of comfort is determined by the aesthetics of their surroundings. People seek out places with pleasing aesthetics and avoid places of minimum aesthetic quality.

It therefore stands to reason that recreation demand will be greater at areas offering positive aesthetic appeal.

Another drive common among humans is the desire for safety and health. Likewise, we will avoid places where the satisfaction of these desires are thwarted and show affinity for places where they are satisfied. Unsafe recreation areas that are a threat to the health and general well-being of the individual will most likely be shunned. Conversely, where the individual perceives no threat to his safety or health, he will likely seek recreation opportunities. The implications for recreation demand are clear; the stories of crime in New York's Central Park and the concomitant decrease in park attendance rates vividly reflect this point.

Preservation of historical, cultural, and natural aspects of our heritage have an obvious effect upon the demand to experience and appreciate them. Simply, if the resources for this type of recreation demand are destroyed, so likewise is destroyed the opportunity for individuals to participate.

Insuring the maximum of quality in the environmental characteristics pertinent to recreation requires wise environmental management. Major features of this concept include a unified approach with two interdependent mandates: (1) preserve and manage park and recreation resources in a way that creates a quality environment base and (2) from that base, convey environmental knowledge and standards to be public. Involved with this process is the concept of ecological planning. This concept suggest that development, operation, and management of natural resources should respond to the dynamics of natural processes.

Ecological planning must consider six elements in the planning process:

1. Ecosystem Inventory
2. Description of Natural Processes
3. Identification of Limiting Factors
4. Attribution of Values
5. Indicators of Stability or Instability

In regard to areas and facilities, the task of the recreator is to bring about the acquisition, development, and operation of areas to satisfy the recreation needs of people. To provide for a meaningful recreation experience, facilities must be available which provide opportunities for activities which are voluntary and allow for freedom of choice, are enjoyable and satisfying, and are diversionary in character Recreation areas and facilities must meet high standards of environmental quality in fulfilling this role.

Chapter IV Outdoor Recreation Demand	42-5.70 thru 42-5.80

Less than professional management and control of the use of recreation areas can have negative environmental results. Too great a concentration of people can destroy vegetative beauty, induce erosion, over-tax sanitary facilities and, in general, destroy the purpose for which a recreation site exists.

Imaginative management is required in order to provide for present demand while at the same time making adjustments in facilities and areas to fit the changing desires of the public and assuring that future choices will not be preempted to the extent that future needs cannot be met.

Urban Recreation Problems 42-5.80

The city today, just as in the past, is a community of substantial size. As defined in the 1970 census the urban population comprises all persons living in urbanized areas and places of 2,500 inhabitants or more outside urbanized areas.

Already 70% of the citizens of the United States and comparable percentages of the people of other industrial countries have become city dwellers. If the process of urbanization continues at its present rate, the majority of the world population will be gathered in cities of 100,000 or more at the end of this century. In the urban industrial societies, cities are the primary centers of human occupation. In the United States, agriculture accounts for no more than 5% of the gross national product.

One need not walk more than a few blocks in any city to see much that is wrong and in dire need of improvement. When one considers that as many as 60 million more people will live in the metropolitan areas in 1980 than lived there in 1960, it seems clear that unless something drastic is done conditions will only get worse.

It is generally believed that the poverty and social isolation of minority groups in central cities is the single most serious problem of the American city today. It must be attacked with urgency, with a greater commitment of resources than has heretofore been the case and with programs designed especially for this purpose.

The cities have long prided themselves on their ability to attract new industry. In many cities the welcome mat is out for industrial prospects. There are many sound reasons for this. The city's economy is dependent on the ability of private enterprise to grow and prosper. New plants and industries create new jobs and personal income climbs. Our public capacity for planning and programming the services required to accommodate accelerated urban growth has not been keeping pace. Some more obvious symptoms of this lag are electrical brown outs, highway traffic jams, fish kills in our streams, telephone system overloads, waiting lists for public services and overcrowded public facilities.

The urban dwellers are provided recreation services by the Federal, State, regional, county and municipal areas of government. While some duplication still exists, there are large gaps of unmet needs. The problem is a better identification of the roles of all levels of government in providing recreation opportunities for urban dwellers in the State.

In providing public opportunities for recreation pursuits, what should be charged for and what should be provided at no additional costs? Urban areas have been concerned over this question for a quarter of a century. In some cities, for instance, fees are charged for the use of public golf courses while the use of lighted tennis courts, athletic fields, and picnic facilities are free. Still other cities charge for camping, the use of boat ramps, and swimming pool admission while no fees are charged for visiting all day in a large municipal park and enjoying picnicking, trails, or indoor exhibit areas.

The problem is a policy that would be reasonable and equitable in establishing fees and charges. Involved in such a policy would be consideration as to amount of charge or fees, type of facility, who is the primary user of the facility, the ability of the users to pay, and where the revenues derived from fees will be used. The policy may be sufficiently broad so as not to deny the use of public areas to any person because of economic reasons.

There is no immediate or recurring problem in the area of urban recreation as acute as the development of a sound financial base for yearly operations and capital improvements. Without financial stability, it becomes virtually impossible to deliver a high level of public recreation service to the urban resident.

Every urban center in North Carolina needs additional land and development to meet urban needs and desires. This need would be somewhat less acute if municipal facilities were used only by residents paying taxes to support their construction, operation, maintenance, and programs.

There are those who move to the suburbs outside the municipal corporate limits to escape the property taxes. Non-urban areas have, historically, been much slower in providing recreation opportunities for the non-urban resident. Too, this service, when provided, has usually been at a lower level. Therefore, non-residents continue to flock into adjoining municipalities to use golf courses, swimming pools, athletic fields, tennis courts, picnic facilities, municipal lakes, and other facilities or programs.

In 1970 a survey was made of municipalities in North Carolina to determine the extent and severity of the problem. Of the 49 cities responding, 14 indicated the difficulty as "extensive", 20 said they were experiencing "some" difficulty, 10 were having "little" difficulty, and only 5 expressed "no" difficulty with non-resident users. Only Charlotte, of the seventeen urban centers, indicated "no" difficulty.

Park lands are purchased and facilities are developed for people to use and enjoy. Accessibility may be severely restricted by the use of two poor planning principals: (1) the area may be remotely located so it becomes inconvenient if not impossible for people to use. The extent of remoteness of a facility is dependent upon the size of the area, the type development, and the "clients" who would normally receive enjoyment in using the area. For instance, a neighborhood park of seven acres, providing tennis courts, family picnicking, Little League ball field, and children's play apparatus would not be accessible if it were located three miles from the residence of a person wishing to use the facilities. By the same reasoning, a regional park of 600 acres providing a golf course, cabins, lake for fishing or sailing, camping area, nature trails, and group picnic shelters would be accessible when located twenty-five miles from an urban center, (2) an area may be inaccessible if there are insufficient approach areas to use in physically getting to the facility. Examples of this are parks developed on islands with the water route as an only means to reach the attraction. Still another example is a large public owned lake without sufficient adjacent public lands or ramp facilities. A third indication may be a vast public beach area with no access except over private property.

The problem then, is how to bring facilities and people closer together and, when a distance exists, how this distance may be bridged. The second problem is how to assure that sufficient lands are acquired adjacent to bodies of water to insure the public use of public waters--oceans, sounds, lakes, ponds, rivers, or streams.

Some urban areas have been in so much haste to acquire lands, that poor quality and location has evolved. Some lands have problems of erosion, lack of vegetation, steep or irregular terrain, environmental intrusions, and are subjected to regular flooding. Other lands acquired through gift or purchase are too near industrial areas, business thoroughfares, or interstate highways.

Too frequently, municipalities attempt to develop facilities more rapidly than funds become available. This leads, usually, to the design and construction of marginal or poor quality structures.

There is now a chance to change this problem into an opportunity so that the lives of urban dwellers may be vastly enriched by a high quality recreation experience on suitable park lands endowed with functional and appealing facilities.

The public sector has the responsibility of providing urban residents with a wide variety of areas so that citizens have a choice of how to invest their leisure.

Providing an acceptable level of choices hinges upon coordination of the public efforts, accessibility of areas and transportation. Too frequently, a variety is available only to the middle income and above citizen leaving those who generally reside in the inner-city with little choice.

Over the past decade, great emphasis has been placed on the acquisition of lands for and development of mini-parks or vest pocket parks. Some administrators feel that this type area will satisfy the public recreation demands of the densely populated inner-city areas.

The mini or vest pocket park is only effective in partially satisfying leisure demands of inner-city residents. To be effective, the small area must be supplemented by a neighborhood park, a community park, a vast city or county park, state and/or Federal wilderness areas and special facilities.

A problem exists as to how, and to what extent it is feasible for public recreation to provide the desirable variety level for all citizens.

The preceding discussion of current urban problems affecting the provision of recreation opportunities has dealt with several distinct problem areas. They were:

1. Population Growth and Concentration in Urban Centers
2. Poverty and Social Isolation of Minorities
3. Inadequacies of Various Public Services
4. Roles of Different Levels of Government in Urban Areas
5. Fees and Charges for Public Recreation Areas
6. Urban Recreation Budget Stability
7. Nonresident Use of Urban Recreation Resources
8. Accessibility of Recreation Resources to Urban Populations (Quality and Location of Areas)
9. Variety of Recreation Opportunities Offered Urban Dwellers

A comprehensive discussion of all the intricate implications of these problems for recreation demand and their possible impact is well beyond the scope of this plan. It is sufficient to note that all of the problems mentioned are restricting, although to varying degrees, the satisfaction of urban recreation demand.

The problems have been presented and their impact on recreation generally declared to be negative. The solution of these problems are the responsibility of all levels of government. The State's role in their solution will be pointed out in Chapters 7 and 8.

Problems of Special Populations 42-5.90

The special populations considered in this plan in relation to recreation demand are the mentally ill, mentally retarded, alcoholic, physically handicapped, imprisoned, aged and youth. Each of these "populations" are comprised of groups of individuals with special needs and constraints regarding recreation. Various problems affect each group in the satisfaction of recreation demand; problems that must be dealt with in a manner not usually found in traditional recreation programs.

There are numerous facilities in North Carolina for the treatment and/or rehabilitation of the mentally ill, mentally retarded, and alcoholic. Located in various parts of the State, each institution serves a designated geographic area. In addition to the eleven institutions, there are 41 mental health program areas, each area containing centers designed to eventually serve the mental health needs of populations of 75,000 to 200,000 citizens. For the fiscal year 1968-1969, the resident population of mental health facilities was 36,303 which included patients in State Mental Hospitals, Centers for the Mentally Retarded, Mental Health Clinics and Centers, and Alcoholic Rehabilitation Centers. The population figure has increased each year since 1950.

The mental health facilities, employing a recreation staff of over 100 have programs which offer a dramatic representation of the fundamentals of recreation services, indoor and outdoor, in the treatment, rehabilitation and resocialization of the alcoholic, mentally ill and retarded. Although a major portion of the recreation opportunities and programs take place on the institution or center-owned grounds, there are progressive efforts underway to more fully utilize community recreation resources. Municipal recreation programs are used as a means of resocialization, learning new skills, and special interest classes.

One of the emerging problems of these progressive endeavors, however, is the unfortunate disparity that often exists between the level of community recreation resources available near the institution and that available in the patient's home community. The obvious effect upon recreation demand in this situation is one of "generating demand" in one geographic area while facilities for its satisfaction in a normal environment do not exist. Thus, many of the benefits to mental health possibly obtained by the patient in the institution are denied or thwarted "on the outside."

Facilities in institutions continue to be a problem. Although quantity of facilities is still important, there are real and urgent needs to improve the quality of existing institutional recreation resources. Presently, most unit recreation areas are quite drab, have conventional hospital furniture, and contain broken or inadequate recreation supplies or equipment.

The physically handicapped person has problems in the satisfaction of recreation demand that are unique. A physical handicap is defined as "any condition which would substantially alter the individual's ability to perform everyday work and play functions in a normal manner." This loss or impairment of function may be the result of genesis, disease, inflamation, or degeneration. The most prevalent physical handicaps are loss of limb, paralysis of part of the body, blindness, deafness, and crippling diseases.

There are approximately eight institutions, schools, or hospitals in North Carolina for the care and rehabilitation of the physically handicapped. All of these offer various indoor and outdoor recreation activities such as sports and games, arts and crafts, dramatics, social events, and outings. In addition to hospitals and centers there are several cities which have physically handicapped persons in their ongoing recreation programs, and a few have special programs for the handicapped which include bowling leagues, day and residential camping programs, special interest classes in arts and crafts, table games, and sports. These recreation programs offer a general representation of activities to meet the needs of the handicapped and offer opportunities for participation in activities for the inherent values derived from recreation.

As recreation for the handicapped is not vastly different from recreation for the non-handicapped, their recreation needs should be considered along with recreation needs of the non-handicapped. Unfortunately, and herein lies the problem, handicapped persons are not adequately considered in recreation programs outside of institutions for the care and rehabilitation of the handicapped. Another problem where such programs are provided is the tendency for them to be geared to the needs of handicapped children; leaving out the handicapped adult.

More consideration for this element of special populations is needed to insure that the objective of "providing recreation opportunities for all people" is to be met.

Another sort of special population is comprised of individuals convicted of criminal acts and subsequently imprisoned.

In North Carolina there are approximately seventy-seven retention units, each serving, as nearly as possible, the offenders from a designated geographic areas. There is an average of 100 to 150 inmates in each of the seventy-seven units. All female inmates are housed in one prison in Raleigh. The correction system in North Carolina houses about 10,000 inmates of which about 325 are women.

Recreation activities offered consist mainly of sports and games, table games, and arts and crafts. Tournaments are used extensively and many units have softball and basketball teams that play in city leagues. Also, volleyball, badminton, shuffleboard, and horseshoes are prominent activities along with movies, reading, and weightlifting. The weightlifting is an AAU program and inmates compete on a state and nationwide basis. There are plans for the initiation of AAU track and field events.

The recreation programs in the prison units have two objectives; (1) to assist with inmates' prison adjustment, and (2) to provide a portion of the rehabilitation program.

One problem area for the imprisoned that has potential impact on recreation demand is similar to that found in mental institutions. Namely, inmates are not educated as to recreation programs and facilities available to them after they return to their community. Also many of the activities provided in prison are not available in the home communities. Obviously this problem would be lessened with the provision of more and better community recreation facilities in the State.

One problem common to all of the above special populations is one common also to inner city minorities; that of social isolation. This factor definitely affects the amount of participation these groups seek. The solution to the problem will require much evolution of general social attitudes. However, community recreation programs offer a significant potential for re-integration of these groups into meaningful social life.

Another special population is comprised of the aged. Perhaps the most important development with regard to the aged in North Carolina is the increasing acceptance of the concept of aging as a positive element in an individual's life. People are beginning to recognize that living into the later years is almost a universal experience and that it brings with it enormous opportunities for growth and satisfaction.

For many people the years which have been added to average life expectancy are healthy years. Retirement income is low by and large, but it is rising and increasing numbers of older people are achieving financial independence. Increasingly the years of later maturity are being freed from the pressures and responsibilities of early adulthood and are providing opportunity for the reinstatement of interests, and the development of new interests, which had to be set aside during the work and parental period of life.

This is not to say that the later years are without problems. The energy of youth does decline with the years. Long-term illness becomes more prevalent in the later years and is a severe disability for some older people. Completion of the parental role and retirement from work may lead to the loss of ego rewards. Reduced income, loss of spouse, illness and other factors lead to a good deal of social isolation and loneliness. These circumstances are real and they beset many of the older citizens of North Carolina.

Most of the problems of later years do have a direct impact upon the satisfaction of the recreation desires of the elderly. The desire to be happy and refreshed is certainly not lessened with age and therefore provisions to overcome the barriers to recreation participation of the elderly must be made. The level of this demand is evidenced by the fact that a great number of senior citizens, perhaps even the majority, desire to belong to some type of organization or be with groups that provide wholesome opportunities for recreation. According to the latest statistics available, there are over 600 senior citizens clubs and groups in North Carolina and the number of members enrolled in clubs is approximately 22,000. It is estimated that the number of clubs and groups has more than doubled since 1968.

As with many recreation user populations, lack of adequate transportation and the resultant inaccessibility of recreation resources for the aged constitute one of the major problems regarding their recreation demand. Even where public transportation means exist in the form of buses, they do not usually have adequate arrangements for the handicapped or elderly to enter and depart from the bus. The steps are too high and are usually painted grey or a similar color that does not clearly distinguish each step. Curbs or the level of pavement is usually an unnavigable distance from the first step of the bus.

The implications for recreation programs for the elderly thus are such that their accessibility is of prime concern.

Another problem evident in the State with regard to the elderly is the lack of recreation programs in nursing homes for the aging. Obviously such lack of programs affects recreation demand by this group of individuals in a negative manner; both quantitatively and qualitatively.

At the opposite end of the age scale another special population is found; youth. The major problems affecting their recreation demand are in the area of programs for youth. Facilities are quite often lacking and where they exist, the programs offered are boring and irrelevant to the needs and interests of today's youth. There is thought to be some sort of mystical and traditional chasm between the ideals, desires and needs of youth and adults. Real or not, this attitude often leads to lack of communication between the youth and adult. Fortunately this situation is improving in some areas as evidenced by the placement of youth on recreation commissions. The solution to the peculiarities of recreation demand of youth will require a coordinated youth-adult effort.

Chapter IV — 43-0.00 thru 43-1.00
Outdoor Recreation Demand

Changing Patterns of Demand — 43-0.00

One of the most important demand-related considerations that recreation planners must make lies in the area of identifying changing patterns of demand. Conclusions regarding this subject have a very direct and important impact upon recommended actions to meet anticipated future demand.

This is not to say, however, the changing patterns of demand in the context of the past and present will accurately foretell future traits of recreation demand. It has already been said that certain special problems of recreation demand will also affect future participation, particularly in the area of technological advances of importance to recreation. The forecasting of recreation demand based solely upon current trends is likely to omit consideration of probable future conditions that do not currently exist and result in biased, inaccurate, and misleading predictions.

It is, therefore, with this understanding that the following section should be viewed. It identifies some current trends but does not perform an analysis of probable effects caused by post-existing conditions.

Current Use Study — 43-1.00

This study was undertaken by the Research Triangle Institute to provide SCORP planners in North Carolina with information concerning visitor usage at Federal and State recreation areas within the State. Primarily, attention was focused on identifying patterns or trends in visitor use of recreation areas and determining their significance for future State recreation planning. In this analysis, the following types of visitor use statistics were examined:

1. Total annual attendance
2. Recreation activity use
3. Monthly attendance

In addition to recreation area statistics, boat registration and hunting and fishing license data were analyzed in order to provide a measure of those types of recreation activities.

Figure IV. 1 graphically depicts the annual attendance parameter as measured at various recreation sites across the State. The percentage increase from 1965 to 1969 for each area is presented in Table IV. 43. Total attendance has increased in all sites, ranging from 1.8% at John H. Kerr Reservoir to 65.2% at the Blue Ridge Parkway. For the same period, State population has increased by 7.9%. This increase naturally accounts for some of the increased attendance at recreation areas. Attendance in some areas, however, has been increasing more rapidly than population; thus it is of interest to examine changes in per capita attendance.

TABLE IV. 43

(43-1.00)

PER CENT INCREASE IN TOTAL ATTENDANCE 1965-1969

Site	Per Cent Increase
State Parks	19.4
State Historic Sites*	13.4
National Forests*	12.7
Great Smoky Mountains National Park	6.3
Blue Ridge Parkway	65.2
Cape Hatteras National Seashore	4.9
John H. Kerr Reservoir	1.8
Tennessee Valley Authority Lakes	3.4

* 1966-1969

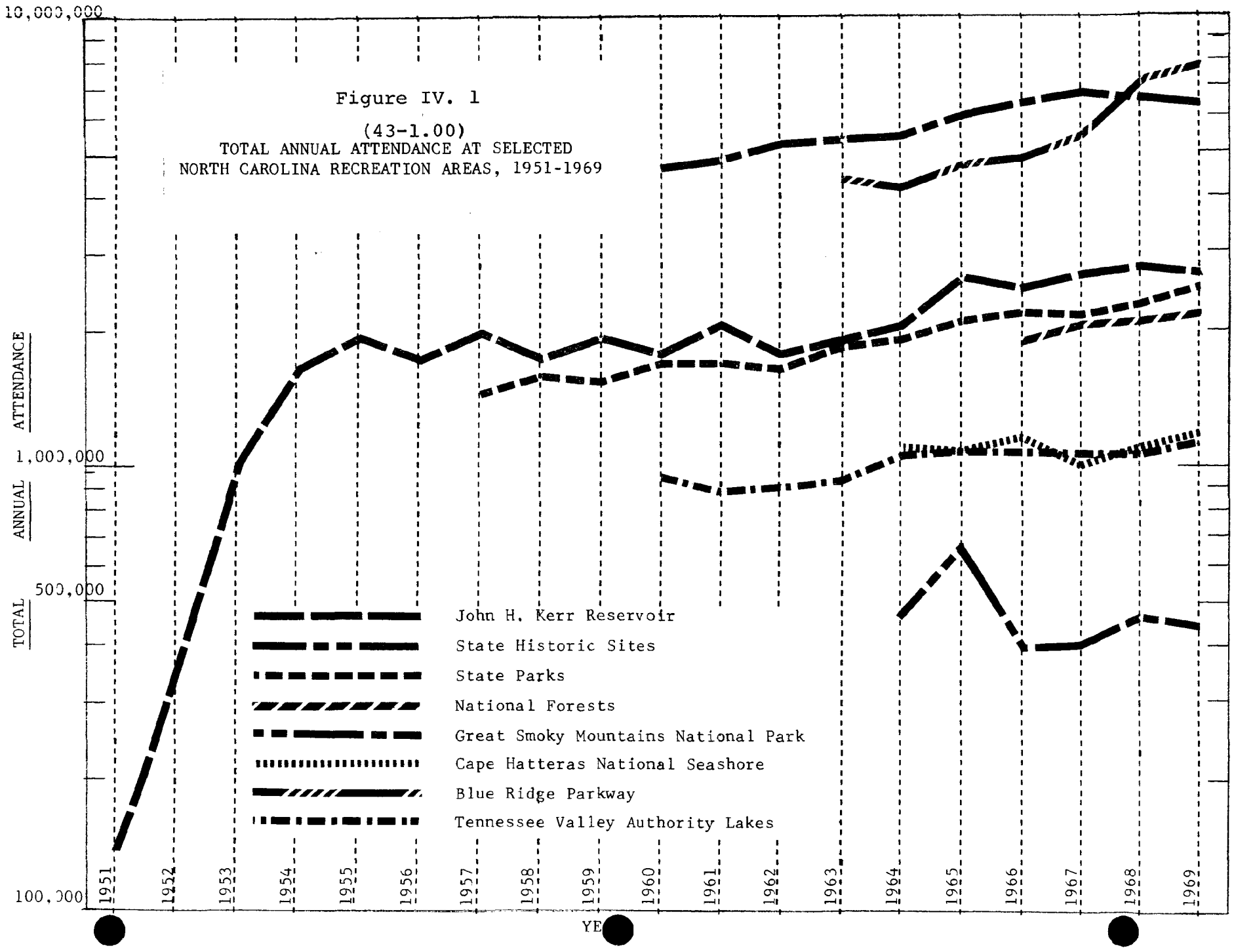


Figure IV. 1

(43-1.00)

TOTAL ANNUAL ATTENDANCE AT SELECTED NORTH CAROLINA RECREATION AREAS, 1951-1969

To identify trends independent of population growth, attendance was computed on a per capita basis. Attendance figures were analyzed by using regression methods. The resulting trends were then tested statistically to determine if they differed significantly among areas. Table IV. 44 lists the areas, years and trends.

TABLE IV. 44

(43-1.00)

TRENDS IN PER CAPITA ANNUAL ATTENDANCE

Area	Years	Annual Percent Increase
State Parks	1957-1969	3
State Historic Sites	1964-1969	None
National Forests	1966-1969	Time series too short
Great Smoky Mountains National Park	1960-1969	3
Blue Ridge Parkway	1963-1969	9.8
Cape Hatteras National Seashore	1964-1969	None
John H. Kerr Reservoir	1954-1969	2
Tennessee Valley Authority Lakes	1960-1969	1

Per capita attendance at State Historic Sites showed no significant trend. During 1964 and 1965, attendance at Ft. Fisher was abnormally high due to the centennial celebration of the Civil War. This high attendance affected the trend analysis making it appear that no trend existed. However, since the percentage increase in total annual attendance from 1966 to 1969 was 13.4%, the probability is high that if attendance at Ft. Fisher were disregarded an increase in per capita use would exist.

Cape Hatteras National Seashore displayed no significant trend in per capita use. The time series for National Forests was not long enough to determine if a trend existed. Since John H. Kerr Reservoir was being filled for the first several years of operation, per capita

use is analyzed from 1954. Attendance increased by 2% annually. Attendance at State Parks and the Great Smoky Mountains National Park increased by 3% annually, at the Blue Ridge Parkway by 9.8%, and at the Tennessee Valley Authority Lakes by 1%. The increase at the Blue Ridge Parkway was significantly greater than the others. Increases at State Parks, Great Smoky Mountains National Park, and John H. Kerr Reservoir did not differ significantly from one another. The 1% increase for the Tennessee Valley Authority Lakes did differ significantly from the 3% increases for the State Parks and the Great Smoky Mountains National Park.

The change in total attendance was computed for the 1965-1969 period in order to measure recent change. The trends calculated for per capita usage, however, were intentionally calculated over a longer period in order to measure long-term change that might be stable and suitable for making projections of future per capita usage. These trends were calculated by fitting a straight line to the time series of per capita usage. Inspection of the graphs showed that a straight line fitted the data reasonably well for most areas. In some instances, however, the trends were not strictly linear, thus the long-term trend in usage differs from that observed for the most recent five years. These discrepancies between long and short-term trends are pointed up in Table IV. 45, which compares the actual change in total attendance with that which would have been expected on the basis of population growth and change in per capita usage.

State Parks and Blue Ridge Parkway attendance increased approximately as expected. State Historic Sites and National Forests increased considerably more than would have been expected from the long-term trend analysis. Attendance at the Great Smoky Mountains National Park increased at a much lower rate. Cape Hatteras National Seashore attendance failed to rise as expected. A sharp decrease in attendance in 1967 accounted for this. John H. Kerr Reservoir has the greatest discrepancy between actual and expected attendance because attendance has been at nearly the same level since 1965. Attendance for the Tennessee Valley Authority Lakes does not increase as expected. This is also accounted for by an almost constant level of attendance since 1965.

TABLE IV. 45

(43-1.00)

EXPECTED AND ACTUAL PER CENT INCREASE IN TOTAL ATTENDANCE

1965-1969

Site	Expected Per Cent Increase	Actual Per Cent Increase
State Parks	24.1	19.4
State Historic Sites*	6.8	13.4
National Forests*	6.8	12.7
Great Smoky Mountains National Park	24.1	6.3
Blue Ridge Parkway	60.8	65.2
Cape Hatteras National Seashore	7.9	4.9
John H. Kerr Reservoir	18.7	1.8
Tennessee Valley Authority Lakes	13.3	3.4

* 1966-1969

Total visitor use for certain recreation activities is presented in Figures IV. 2, IV. 3, IV. 4, IV. 5, IV. 6, and IV. 7. Recreation activity use statistics were analyzed by regression methods with adjustments made for changes in the total site attendance by computing activity use per visitor. The resulting trends indicate shifts in the amount of activity per capita within each area. The trends were tested to see if they differed significantly among activities within each area. Table IV. 46 lists the areas, years and trends.

At State Parks, camping and hiking both displayed a 4% annual increase. Picnicking and fishing decreased by 1% annually while swimming decreased by 2%. Camping and hiking increases did not differ significantly from one another nor did the decreases in picnicking, fishing and swimming. However, the increases in camping and hiking did differ significantly from the decreases in picnicking, fishing and swimming.

At John H. Kerr Reservoir, only fishing, hunting and sightseeing displayed trends in visitor use. Fishing increased by 11.5% annually, hunting increased by 53% annually and sightseeing decreased by 8%. When tested, these trends differed significantly from one another. The other activities did not show any significant trends.

At the Great Smoky Mountains National Park, camping decreased by 5.6% annually, picnicking by 9%, and swimming by 9%. The only increase was fishing which rose by 3% annually. The other activities did not demonstrate a significant trend.

At the Blue Ridge Parkway, camping, the only activity reported, did not display a significant trend.

Recreation activity patterns in North Carolina recreation areas vary widely. One factor impeding perception of patterns is that the years for which use is reported differ among areas. In addition, activity use for Cape Hatteras National Seashore and the National Forests cannot be satisfactorily tested because the time series is too short.

TABLE IV. 46

(43-1.00)

TRENDS IN PER VISITOR RECREATION ACTIVITY USE

Area	Year	Activity Trend (% Change)									
		Camping (Tent & Trailer)	Picnicking	Hiking	Fishing	Swimming	Boating	Skiing	Hunting	Horseback Riding	Sight-seeing
State Parks	1957-1969	4	-1	4	-1	-2	N.A.	N.A.	N.A.	N.A.	N.A.
John H. Kerr Reservoir	1963-1969*	x	x	N.A.	11.5	x	x	x	53	N.A.	-8
Great Smoky Mountains National Park	1960-1969**	-5.6	-9	x	3	-9	N.A.	N.A.	N.A.	x	N.A.
Blue Ridge Parkway	1963-1969	x	Not Available								
Cape Hatteras National Seashore	1966-1969	Time Series Too Short									
National Forests	1966-1969	Time Series Too Short									

N.A. - Not Available
x - No Significant Trent

*Hunting is from 1964
**Camping data does not follow linear trend for entire time period. Trend is calculated from 1964. Figure IV. 4, shows entire period.

Table IV. 47 lists the areas and years for which monthly attendance data were available. These statistics are presented in Figures IV. 8, IV. 9, IV. 10, IV. 10a, IV. 11, IV. 12, IV. 12a, and IV. 12b. Seasonal patterns and long-run changes were determined from inspection of these graphs.

TABLE IV. 47

(43-1.00)

MONTHLY ATTENDANCE

Area	Years
State Historic Sites	1964-1969
State Parks	1965-1967
Great Smoky Mountains National Park	1960-1969
Cape Hatteras National Seashore	1966-1969
John H. Kerr Reservoir	1952-1969

At State Historic Sites, gradual monthly increases from January (with the exception of a notable drop in May of 1966, 1967 and 1969) lead to a July peak, followed by a slight decrease in August, a sharp decline in September, and then a gradual decrease for the remainder of the year. Extraordinary peaks in 1964 and 1965 are attributable largely to attendance at Ft. Fisher.

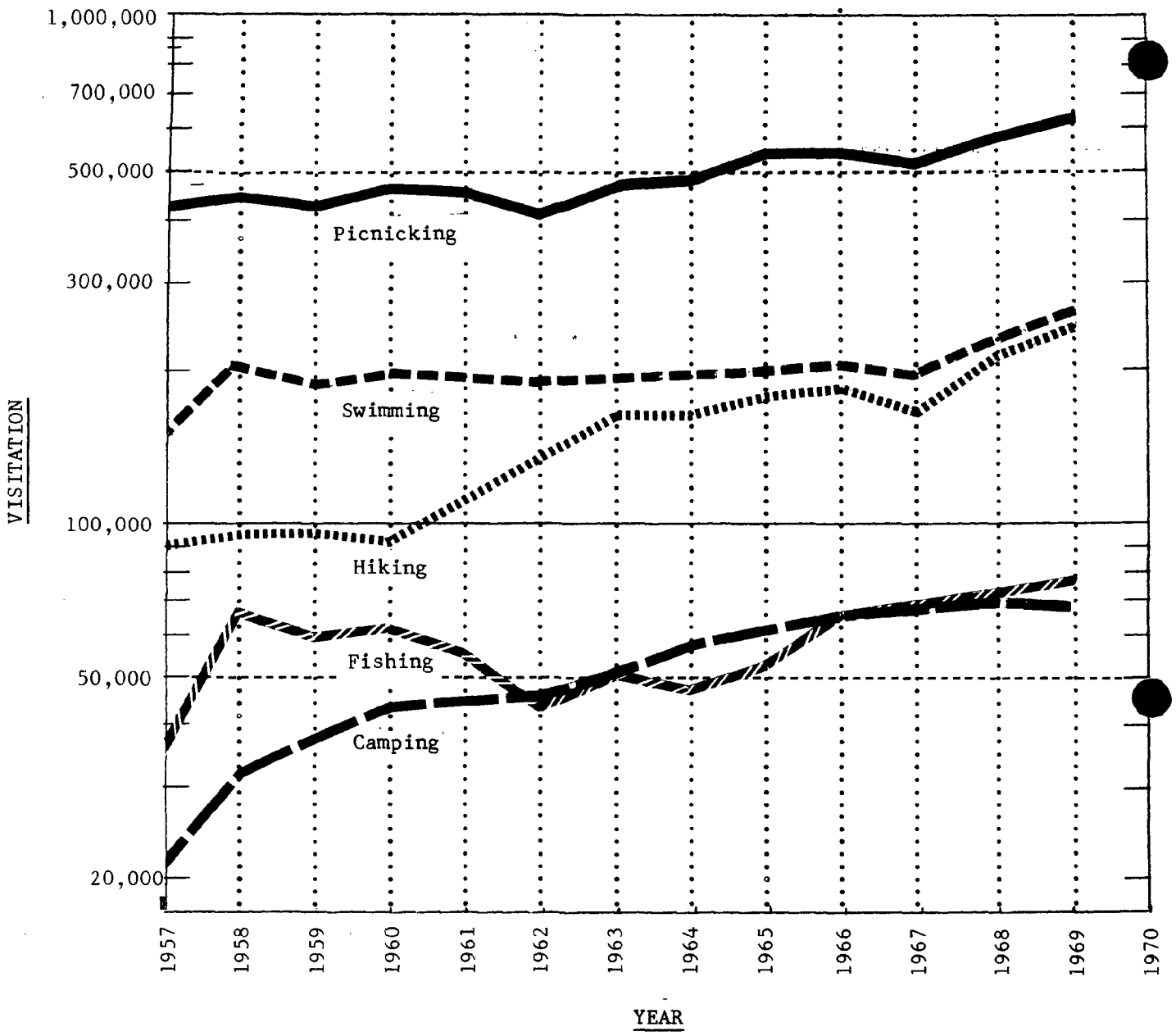


FIGURE IV.2

(43-1.00)

VISITATION BY ACTIVITIES--STATE PARKS

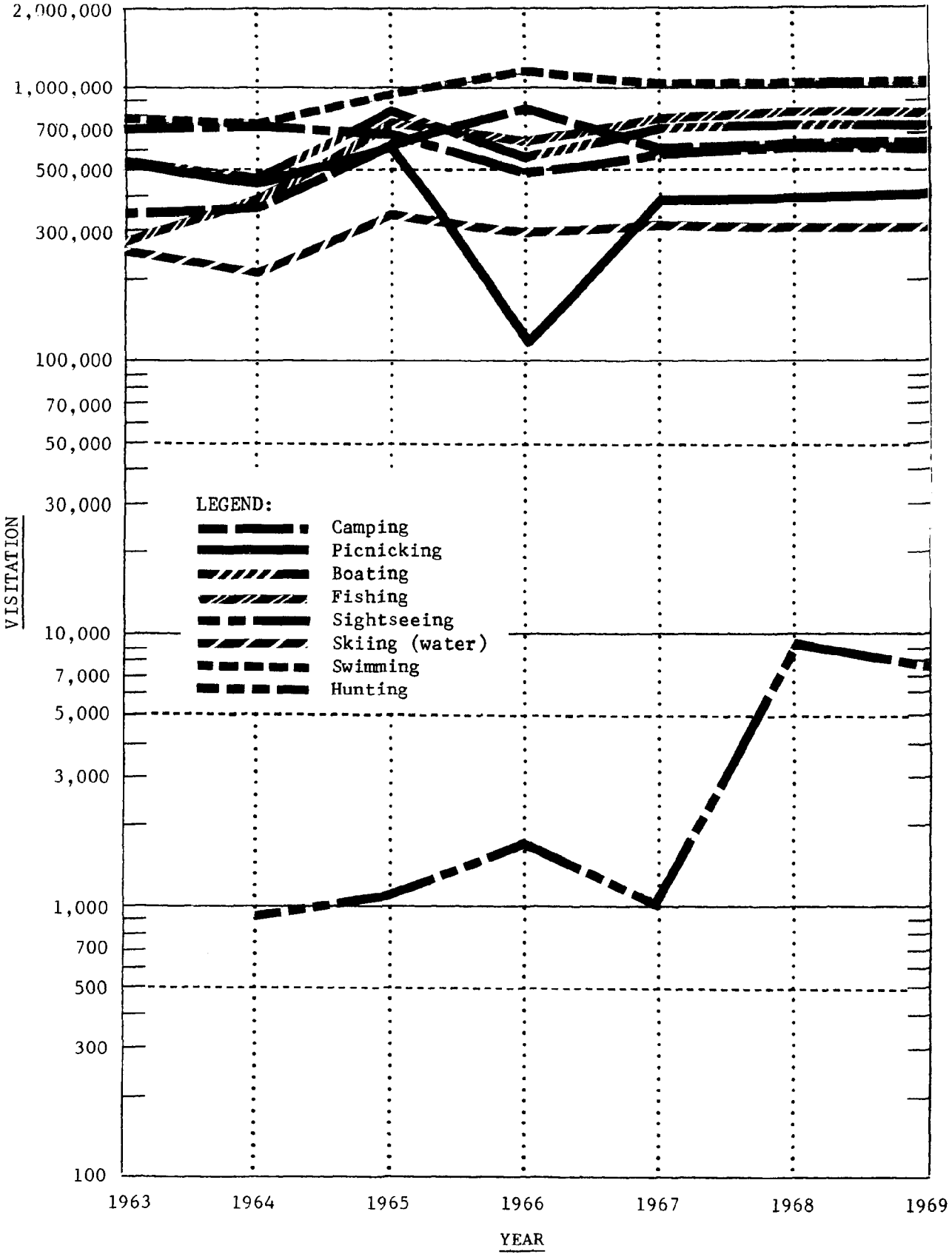


FIGURE IV.3 (43-1.00)

VISITATION BY ACTIVITIES--JOHN H. KERR RESERVOIR

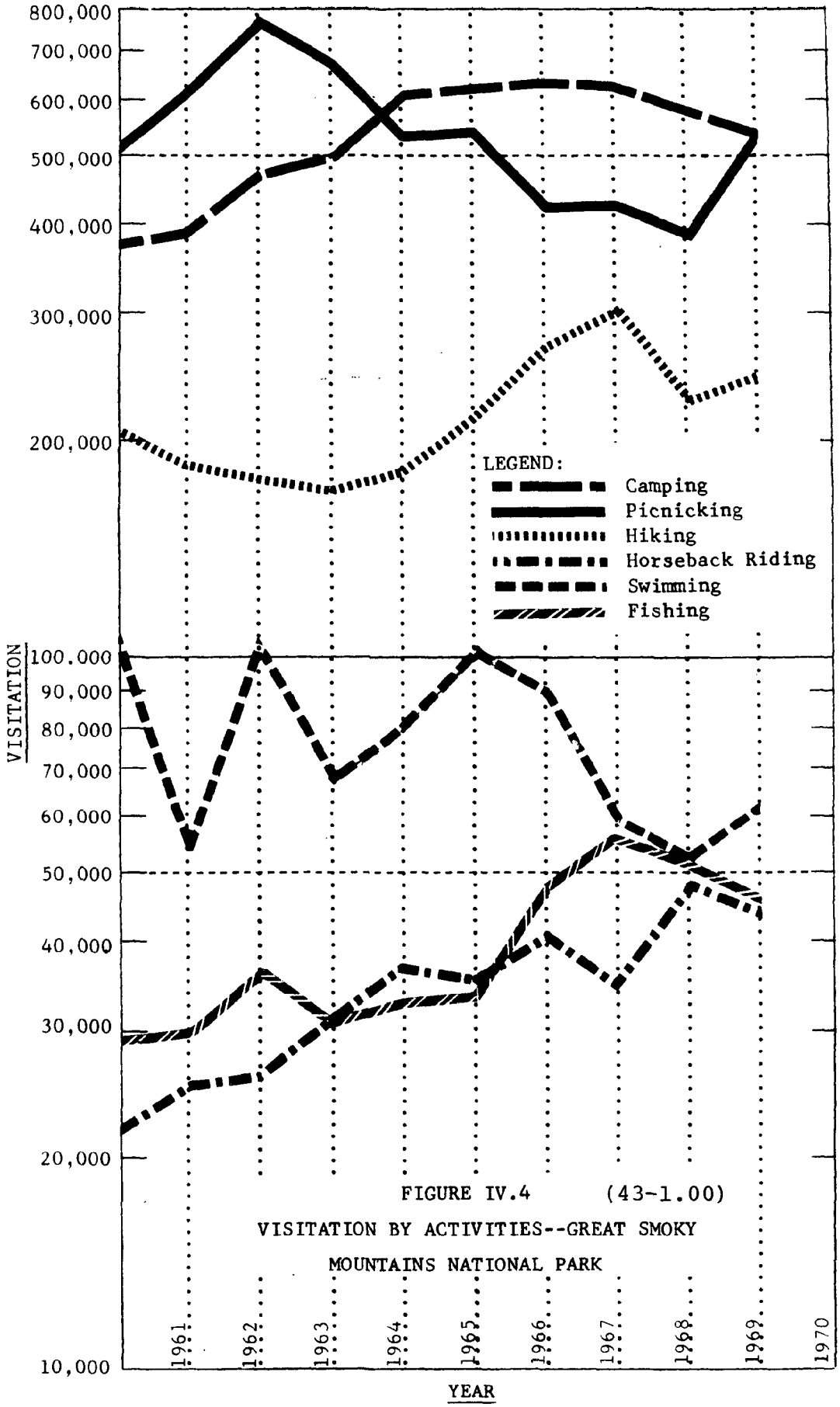


FIGURE IV.4 (43-1.00)

VISITATION BY ACTIVITIES--GREAT SMOKY MOUNTAINS NATIONAL PARK

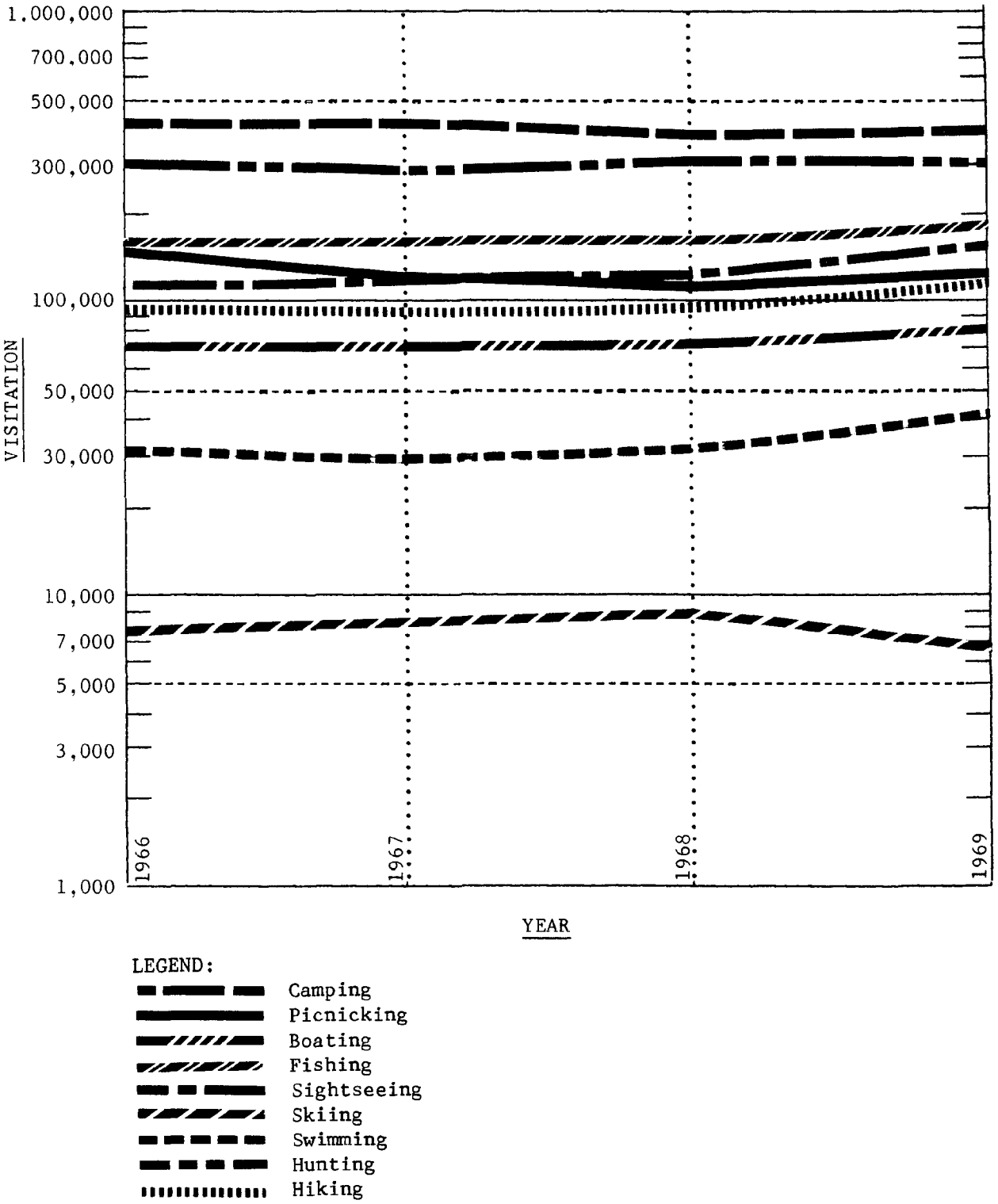


FIGURE IV.5

VISITATION BY ACTIVITIES--NATIONAL FORESTS

(43-1.00)

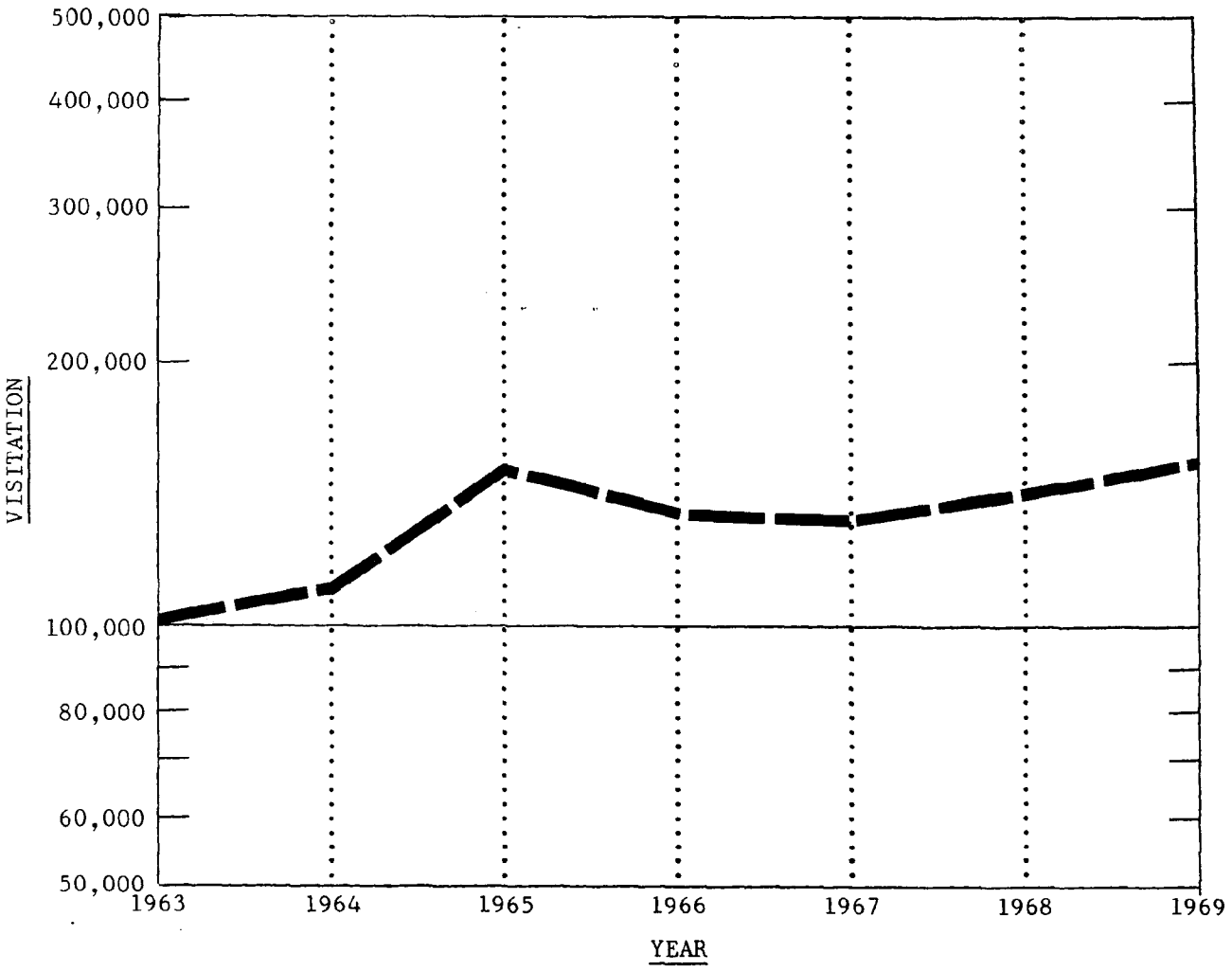


FIGURE IV.6

VISITATION BY ACTIVITIES--BLUE RIDGE PARKWAY

(43-1.00)

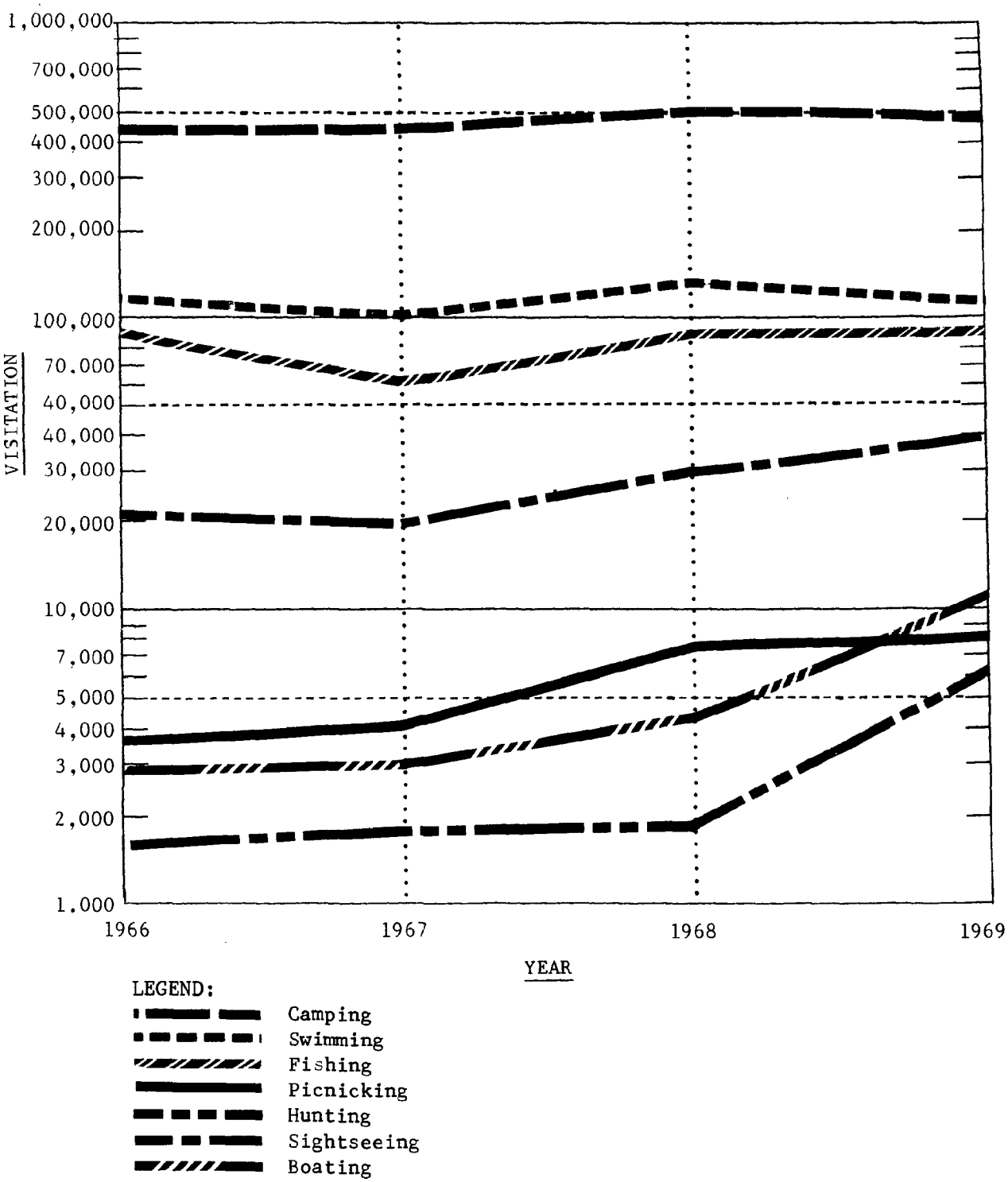


FIGURE IV.7

VISITATION BY ACTIVITIES--CAPE HATTERAS NATIONAL SEASHORE

(43-1.00)

At State Parks beginning with a slight increase from January to February, attendance rose rapidly reaching a peak in July, dropped sharply in September, changed only slightly in October, and then decreased gradually until December.

At Great Smoky Mountains National Park, attendance rose gradually until May, then increased sharply generally peaking in July, slightly dropped in August, fell sharply in September, then rose in October, followed by a sharp decrease in November and gradual drop in December. The October rise is attributable to the fall foliage season.

At Cape Hatteras National Seashore, attendance gradually increased until March or April. This was followed by a sharp rise reaching a peak in either July or August with little difference between the two monthly levels. A very sharp drop occurred in September followed by a gradual decrease for the remainder of the year.

At John H. Kerr Reservoir, statistics provide a complete view of attendance from the project's opening to the present developed state. For the early years 1952 and 1953, the monthly changes were very gradual with attendance peaking in July and reaching almost the same level again in November. From 1954 to 1957 the changes became greater with attendance generally peaking in July. From 1958 to 1964, the pattern changed somewhat. Beginning with only a slight change from January to February, attendance rose rapidly, peaked in July, fell slightly in August, dropped sharply in September and October, then decreased gradually for the remainder of the year. This pattern changed further from 1965 to 1969. Again, beginning with the slight change from January to February, monthly attendance rose very steeply, peaked in July, decreased slightly in August, followed by a sharp drop in September and then gradually fell for the remainder of the year.

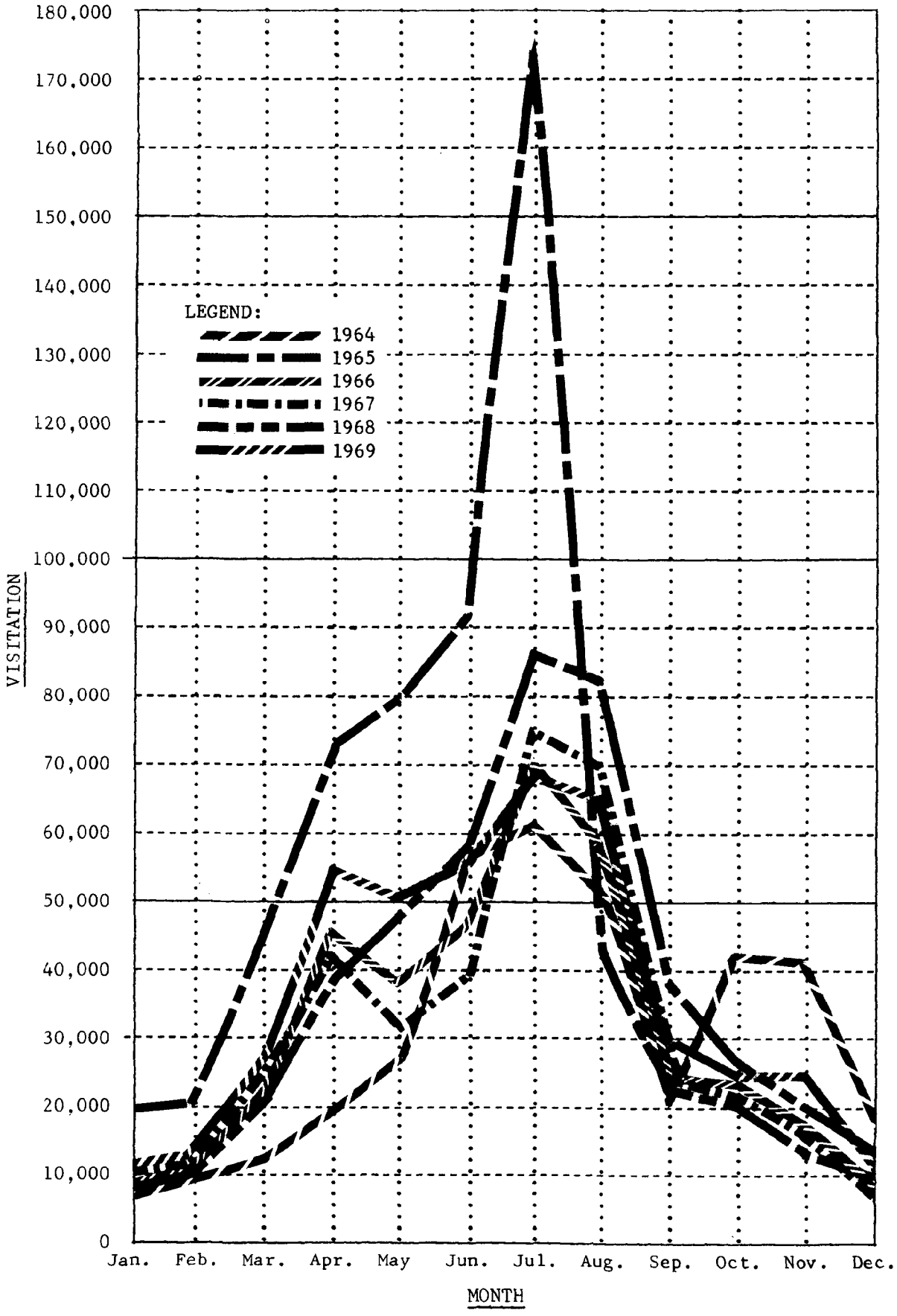


FIGURE IV.8 (43-1.00)

MONTHLY VISITATION--STATE HISTORIC SITES, 1964-1969

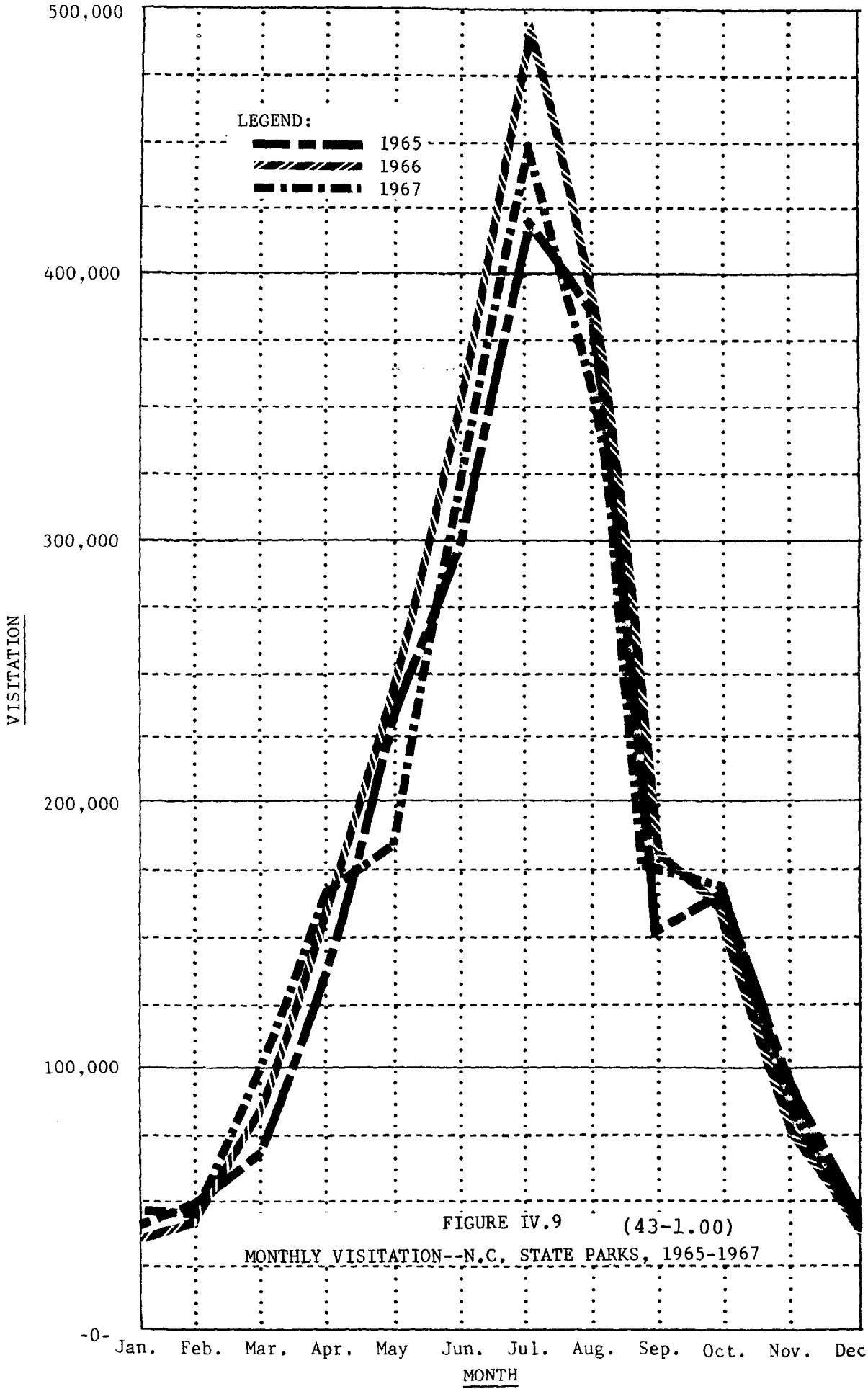


FIGURE IV.9 (43-1.00)

MONTHLY VISITATION--N.C. STATE PARKS, 1965-1967

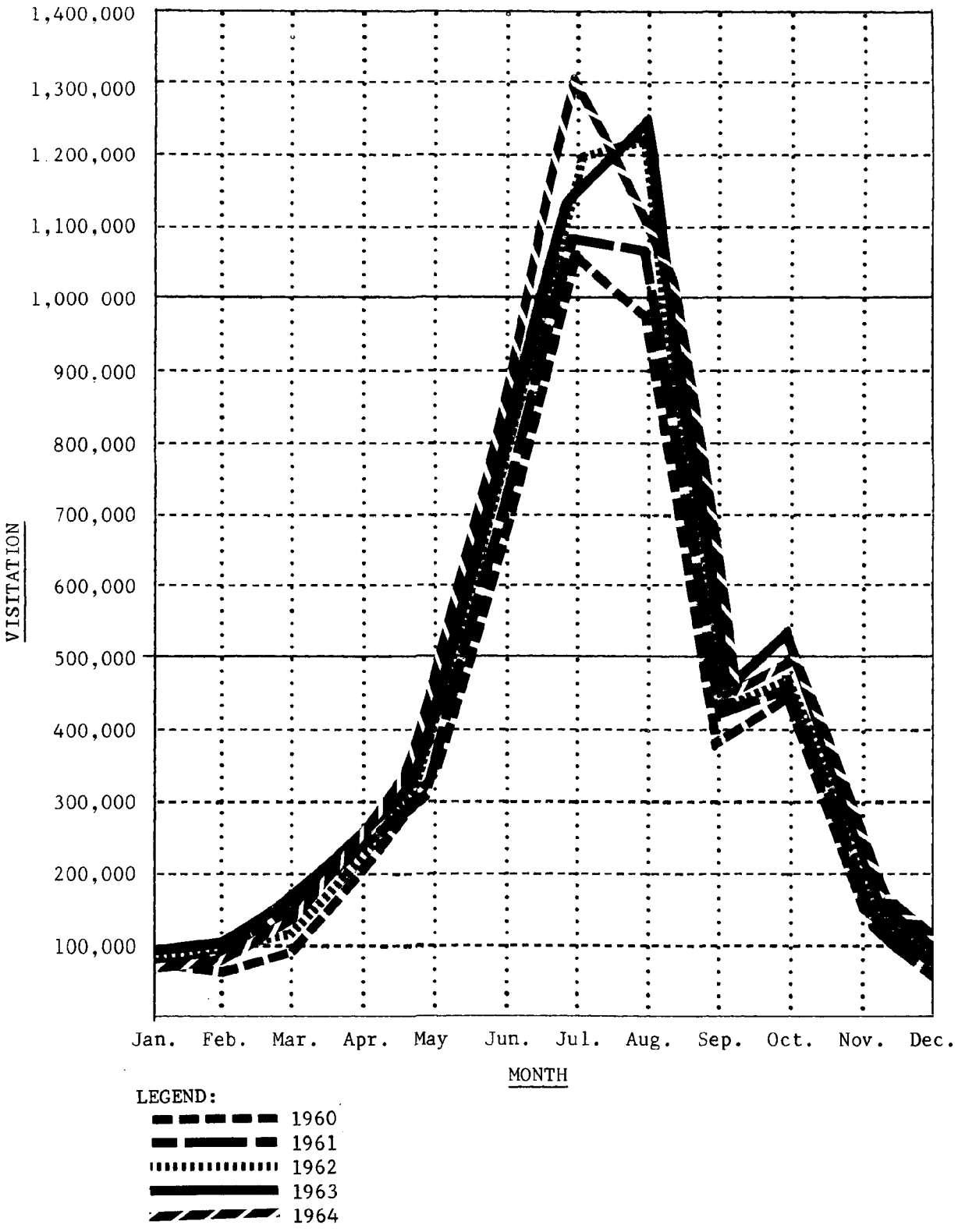


FIGURE IV.10

MONTHLY VISITATION--GREAT SMOKY MOUNTAINS NATIONAL PARK, 1960-1964

(43-1.00)

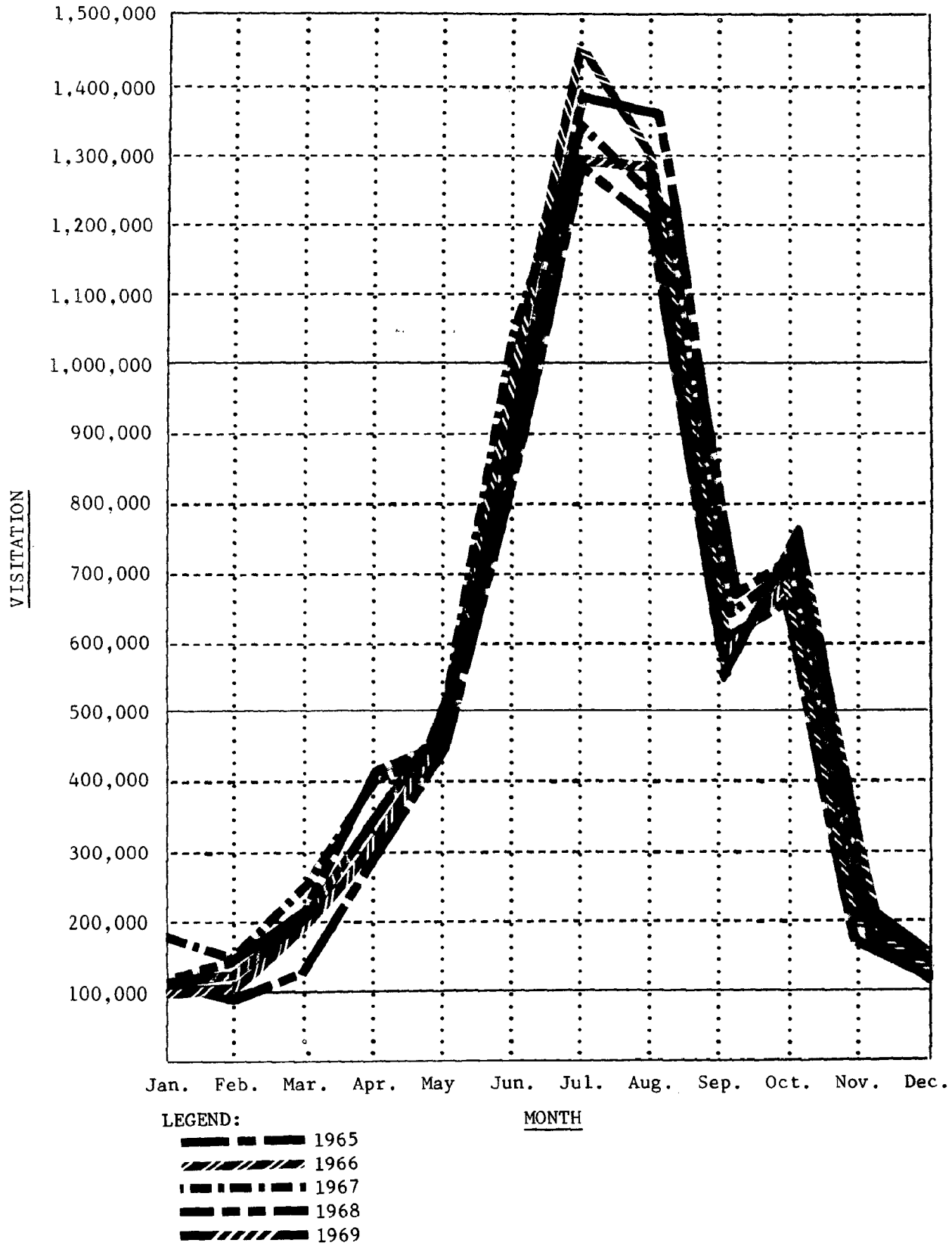


FIGURE IV.10a

MONTHLY VISITATION--GREAT SMOKY MOUNTAINS NATIONAL PARK, 1965-1969

(43-1.00)

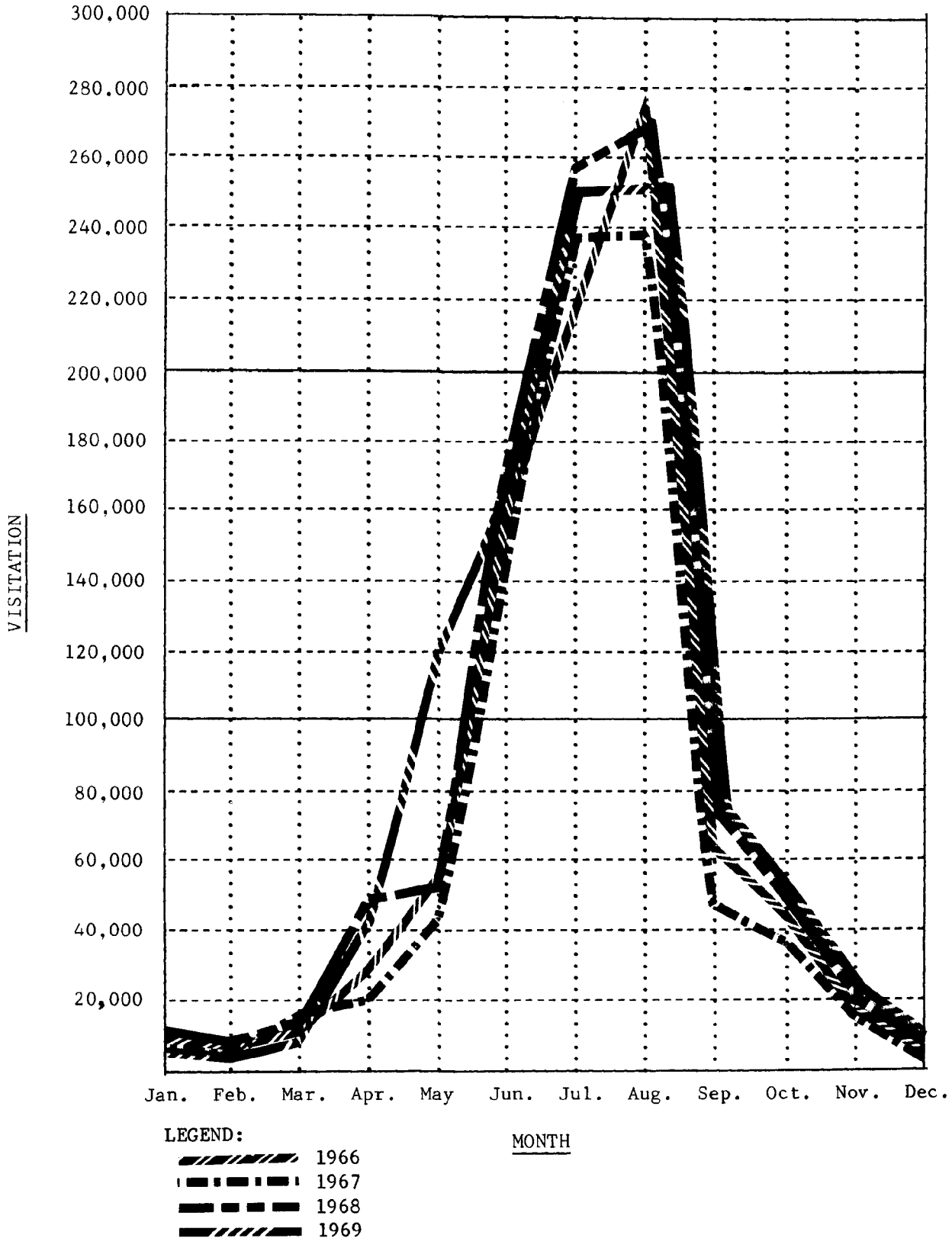


FIGURE IV.11

MONTHLY VISITATION--CAPE HATTERAS NATIONAL SEASHORE, 1966-1969

(43-1.00)

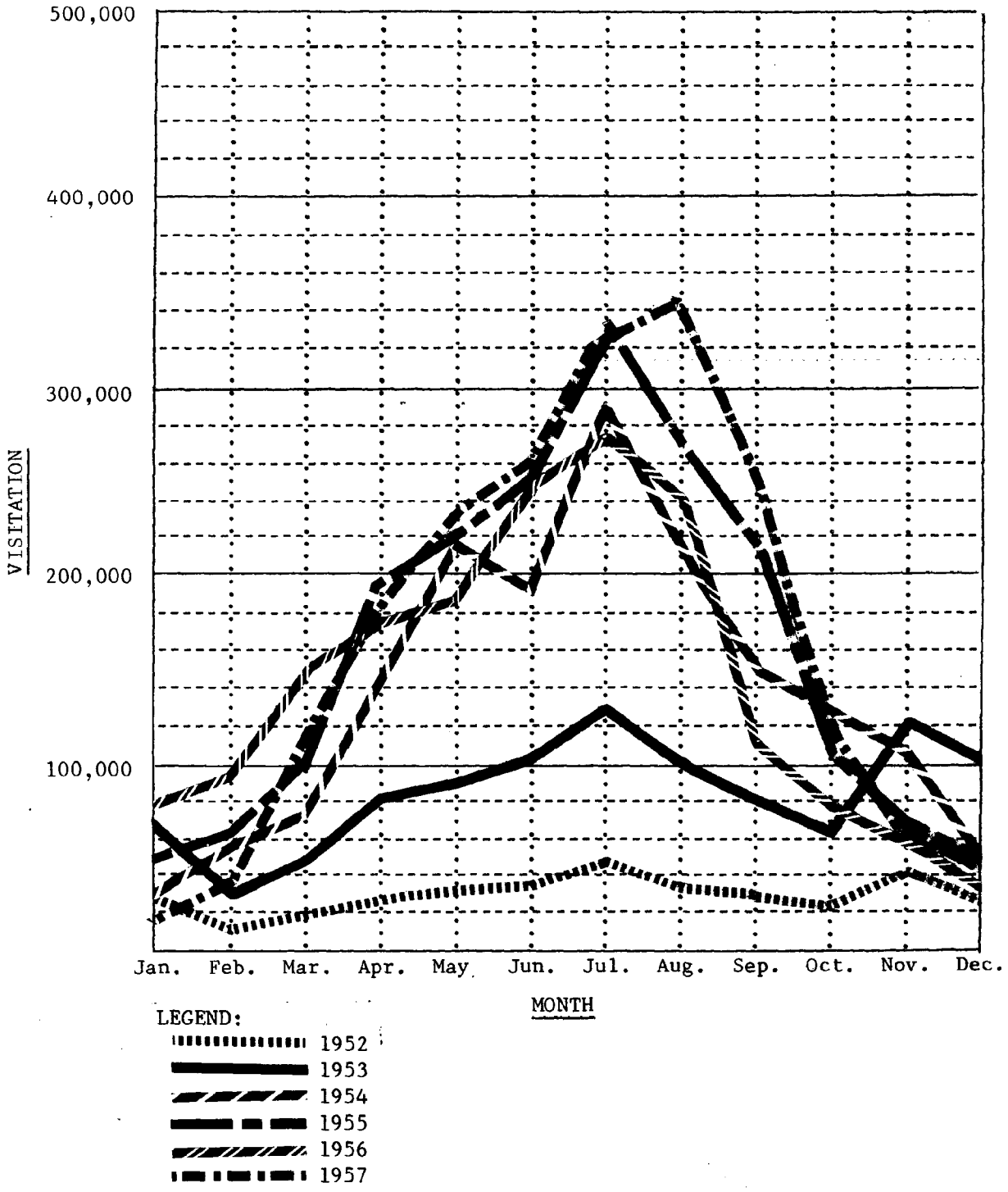


FIGURE IV.12

MONTHLY VISITATION--JOHN H. KERR RESERVOIR, 1952-1957

(43-1.00)

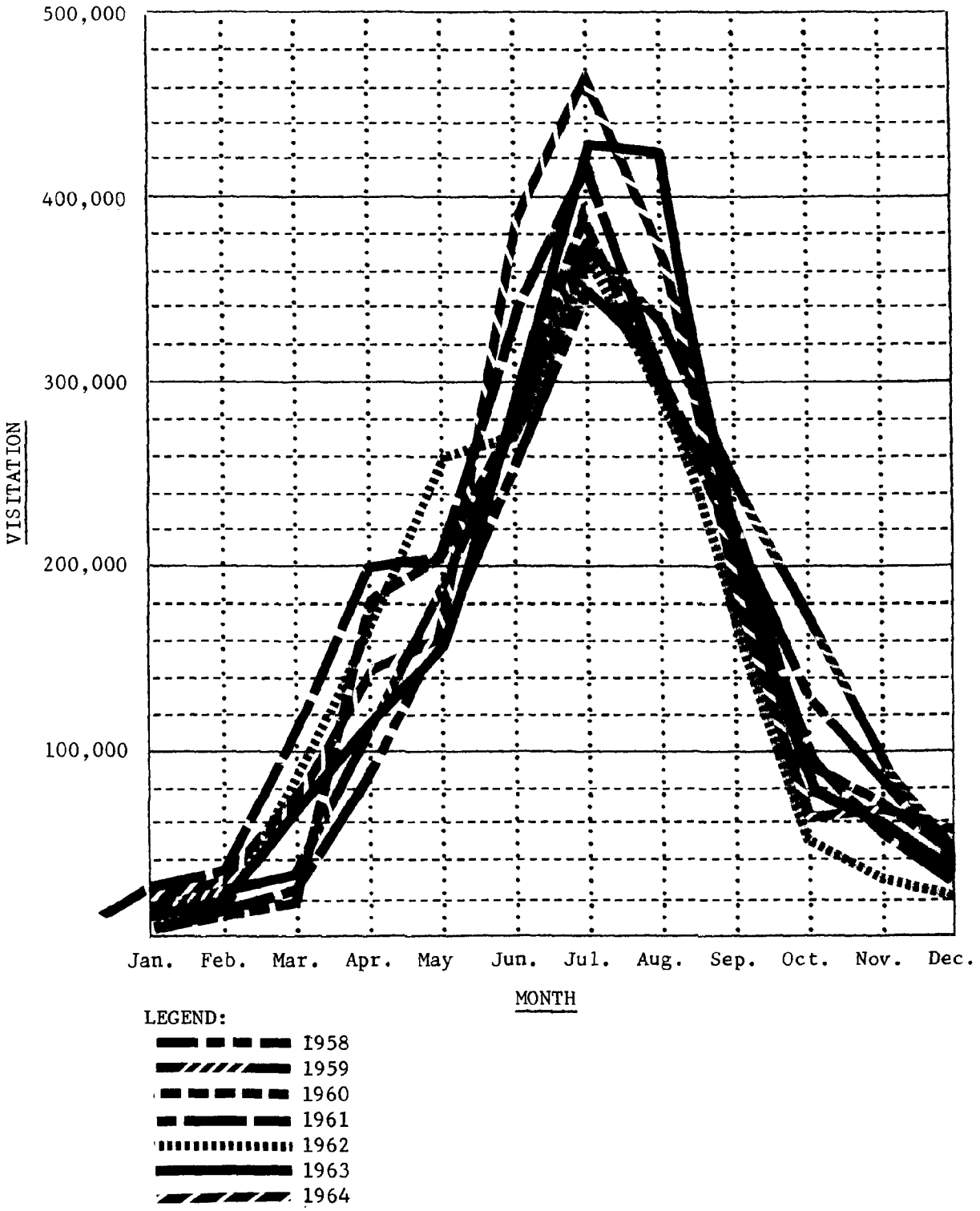


FIGURE IV.12a

MONTHLY VISITATION--JOHN H. KERR RESERVOIR, 1958-1964

(43-1.00)

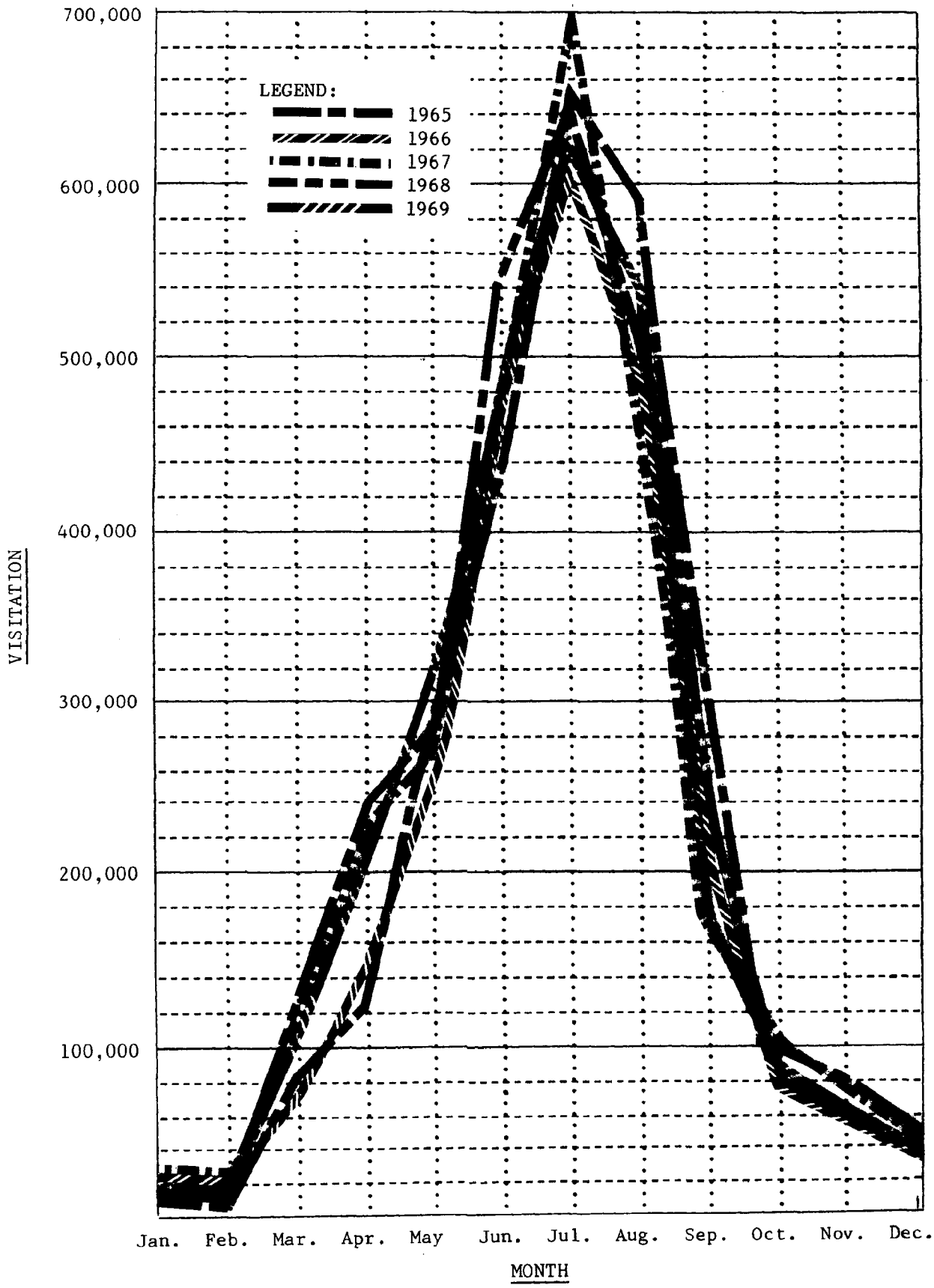


FIGURE IV.12b

MONTHLY VISITATION--JOHN H. KERR RESERVOIR, 1965-1969

(43-1.00)

Hunting and fishing differ markedly from other outdoor recreation activities in the type of location in which they occur: they are not allowed on many public outdoor recreation sites. On the other hand, some special sites are set aside for these activities, and they also occur on private lands and waters. Because of the nature of these activities, figures comparable to "attendance" data are not available. As an alternative, resort has been made to data on licenses issued to persons engaging in these activities in North Carolina.

License data, however, require some adjustment and interpretation:

1. Licenses are issued by the year and for shorter terms. To combine these categories overestimates total activity; to omit short-term licenses underestimates it. As an approximation, the dollar value of licenses issued has been used here as a measure from which to calculate the trend in these activities as evidenced by data.

2. Since the level of license fees changed during the period studied, dollar values were readjusted as necessary to put all years on a common price basis for each type of license.

3. It should be noted that some hunters and a substantial proportion of fishermen (as much as 47% in 1964-1965 according to the Division of Inland Fisheries) do not need licenses under certain conditions. Thus, significant amounts of these activities occur outside the measures reported here.

Hunting and fishing revenues from licenses of all durations were divided into two groups: resident and nonresident. Trends in these groups are presented in Figure IV. 13.

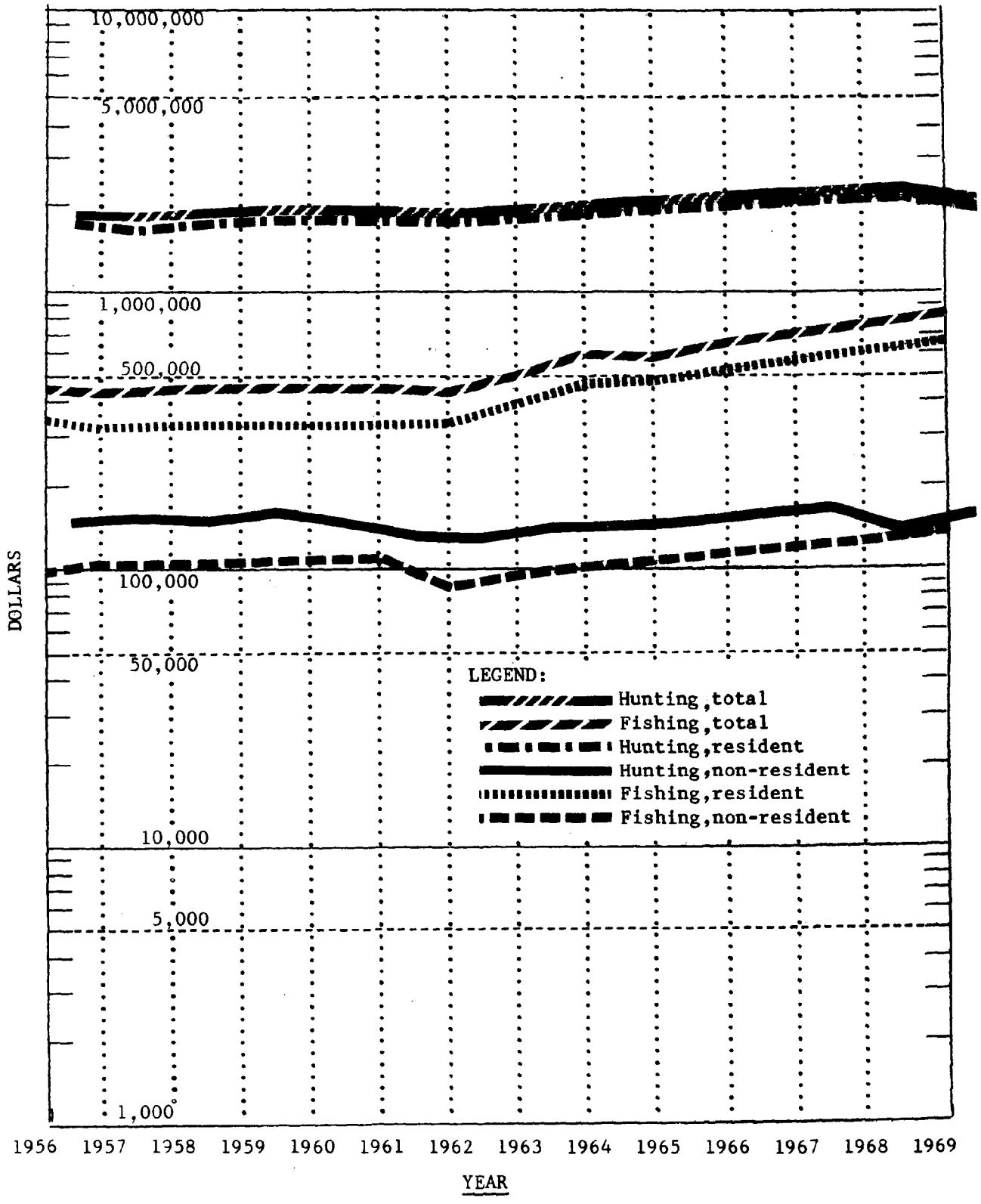


FIGURE IV.13

NORTH CAROLINA HUNTING AND FISHING LICENSE SALES, 1956-1969

(43-1.00)

As measured by license revenue, resident hunting has increased 20% from the 1956-1957 season to the 1969-1970 season, while nonresident hunting has increased 13%. The average for both groups has risen 19%.

Judged by the revenues, hunting by residents in North Carolina is increasing at about 1.4% per year, while that by nonresidents is increasing at 1% per year.

Resident fishing measured by license revenue has increased 100% from 1956 to 1969. Nonresident fishing has increased 47%. The average for both groups has risen 88%.

On the basis of license revenues, fishing by residents in North Carolina is rising at 5.5% per year and that by nonresidents at 3% per year.

The numerical and per cent changes in number of hunting and fishing licenses issued are presented in Table IV. 48. Trout licenses are also included because of their exceedingly rapid growth.

Until the 1961-1962 season only an annual nonresident hunting license was sold. At that time a six-day nonresident license was introduced. Annual nonresident licenses dropped that year to 4,000 from approximately 6,900 for the previous season. For the 1961-1962 season, almost 2,600 of the new six-day nonresident licenses were sold. Totals for this short-term license varied about this level in succeeding years. The number of annual licenses issued has risen since the 1961-1962 season, reaching a high of 5,500 for the 1969-1970 season, but has not regained the levels reached before the short-term licenses were instituted.

TABLE IV. 48

(43-1.00)

NUMERICAL AND PER CENT CHANGES IN THE NUMBER OF HUNTING AND FISHING LICENSES

License	Type of License					
	Annual			Combination Hunting and Fishing	Trout	
	Nonresident	State Resident	County		Nonresident	Resident
Hunting						
1956-57 Season	6,587	82,505	128,859	143,912	-	N/A -
1965-66 Season	4,850	113,832	137,463	162,260		
1969-70 Season	5,539	120,237	97,654	175,441		
Fishing						
1956	4,551	59,503	16,653	N/A	1,496	27,560
1965	4,830	88,460	29,736		2,860	51,532
1969	7,022	138,599	31,431		3,342	61,661
Hunting						
From 1956-57 Season to 1969-70 Season	-16	46	-24	22	-	N/A -
From 1965-66 Season to 1969-70 Season	14	6	-29	8	-	N/A -
Fishing						
From 1956-57 Season to 1969-70 Season	54	133	89	N/A	123	124
From 1965-66 Season to 1969-70 Season	45	57	6		17	20

N/A - Not applicable

Licenses issued to State residents have risen 46% from the 1956-1957 season to 1969-1970 season while county resident licenses have decreased 24%. Since 1956-1957 the number of State resident hunting licenses has generally risen. In contrast, the number of county resident hunting licenses rose until the early 60's and since then has been in a downtrend with the result that in 1969-1970 they accounted for only 45% of the licenses issued, although they have been the majority of resident licenses issued in previous years.

The number of combination hunting and fishing licenses has risen 22% from 1956-1957 to 1969-1970. During the first several years of the period, the number fluctuated but after 1961-1962 the number rose consistently until 1969-1970 when it dropped 8%.

Annual nonresident fishing licenses have increased from 1956-1969 by 54%. In spite of this increase, these licenses accounted for less than 4% of all fishing licenses issued (excluding those for trout and the combination of hunting and fishing licenses).

The number of State resident licenses has risen 133% since 1956. County resident licenses have increased by 89% during the same period and have been quite level in trend for the past six years.

Trout licenses have been increasing almost as rapidly as State resident licenses: 124% during the period since 1956, although they have declined 5% since the peak year of 1956. Nonresident trout licenses have risen equally rapidly since 1956 and had reached their maximum number to date in 1969.

Boating is another important recreation activity for which visitation records alone do not tell the story. Although actual "use" of boating as an activity cannot be measured from available

site attendance figures, the number of boats can be tabulated since all motor boats with inboard or outboard motors of more than ten horsepower must be registered with the State. From 1960, when registration was started, to 1969 the number of such boats has increased by 88%. The upward trend has been quite smooth at a rate of 7.2% per year. In 1969, 70,687 boats were thus registered. In addition, an unspecified number of boats with lower horsepower motors were in operation, as well as such other types as sailboats and canoes.

The foregoing data and discussion of current trends of outdoor recreation demand at selected recreation areas in North Carolina lead to certain summary implications.

Total annual attendance increase at all sites ranged from 1.8% to 65.2% between 1965 and 1969. Per capita annual attendance has also increased for all types of sites with the exception of Cape Hatteras National Seashore and State Historic Sites and has ranged from 1% to 9.8%. It should be noted that per capita trends for some sites (John H. Kerr Reservoir, the Great Smoky Mountains National Park, and the Tennessee Valley Authority Lakes) should not be used to project future attendance without further evaluation since attendance patterns in recent years have been changing.

The trends of use of particular recreation activities, such as picnicking and camping, in North Carolina recreation areas vary widely. One factor impeding perception of trends is that the years for which use is reported differ among areas. In addition, trends in activity use for Cape Hatteras National Seashore and the National Forests cannot be satisfactorily tested because the time series is too short.

Visitor use at North Carolina recreation areas does follow definite seasonal patterns. Beginning in January attendance rises to a peak in July, decreases slightly in August, drops sharply in September and then falls gradually for the remainder of the year. For some areas the monthly changes are greater than for others, and exceptions such as the October rise for the Great Smoky Mountains National Park do exist, however, the pattern generally applied for all recreation areas in North Carolina.

Attendance patterns also change as a site develops. From examining data for John H. Kerr Reservoir, it is evident that attendance becomes more and more seasonal with increasingly sharper monthly changes as the site develops. The pattern of attendance at

State Parks and at Great Smoky Mountains National Park, disregarding the October rise, is very similar to the recent attendance pattern at Kerr Reservoir. If the earlier attendance patterns for these two sites correspond to those for John H. Kerr Reservoir, it is probable that attendance follows this general pattern as a site develops.

Because attendance or visitation data were not available for hunting, fishing and boating, figures on licenses and registrations issued were used to provide a rough measure of the amount of recreation involved. Fishing and boating have increased considerably more rapidly than hunting during the years examined.

Anticipated Demand 44-0.00

The essence of planning is anticipating the future and preparing for expected conditions. The data obtained regarding the recreational behavior of North Carolinians has therefore been utilized to project future levels of recreation demand.

As with so many facets of future American society, the best available techniques for forecasting future conditions indicate considerable increases in recreation demand. For some activities the anticipated increases are phenomenal and practically inconceivable. Projections, however, are only as good as the assumptions upon which they must be based.

The technique for projecting future levels of recreation demand in North Carolina considered three basic factors which have been deemed important influences. These are population, income, and leisure time. The application of these factors was also governed by certain assumptions regarding their effect upon demand. It is therefore necessary that these projections be viewed in a probability framework since, contrary to popular belief, planners just are not equipped with crystal balls.

The assumptions are:

- population will increase at expected rates as determined by the Bureau of Economic Analysis;
- increases in income and leisure time will occur at expected rates as determined by the Bureau of Labor Statistics;
- the degree and direction of present relationships between income and demand will continue for the near future; and
- generally, recreation demand will increase directly proportional to increases in population, income, and leisure time.

The year 1971 was used as a base year for the process of projecting demand; and, therefore, the population and demand figures for that year became the "benchmarks."

Population is expected to increase 7.39% by 1976, 20.7% by 1986, and 87.4% by 2020. Income is expected to increase at a rate of .25% annually and leisure time is expected to increase .50% annually.

Applying these factors to the base data, total adult activity days of demand was determined to be 148,819,000 in 1976, 179,755,000 in 1986, and 349,731,000 in 2020. In terms of adult activity days per household, this amounts to 91.84 in 1976, 98.69 in 1986, and 123.67 in 2020.

The projections by activity type appear in Table IV. 49. Projections regarding all types of trips appear in Table IV. 50.

TABLE IV. 49

(44-0.00)

ADULT ACTIVITY DAYS BY SELECTED ACTIVITY

Activity	1971	1976	1986	2020	1971-2020 % Change
Hunting	3,275,000	3,363,300	3,397,400	3,672,200	12.1
Fishing	5,795,000	6,801,000	9,005,700	21,893,200	277.8
Swimming Pool	6,127,000	7,530,200	10,767,300	30,636,400	400.0
Swimming Other	7,017,000	8,155,300	10,605,600	24,621,100	250.9
Canoeing Exercise	558,000	625,000	790,900	1,713,700	207.1
Canoeing View Scenery	226,000	267,900	359,500	909,300	302.3
Hiking-Pack	423,000	580,400	952,700	3,392,400	702.0
Nature Walking	6,428,000	6,875,400	7,603,600	10,317,100	60.5
Bird Watching	5,131,000	5,223,500	5,123,000	4,581,500	-10.8
Picnicking	9,024,000	9,985,800	11,863,800	20,913,900	131.8
Camping	2,837,000	3,556,800	5,266,800	15,947,700	462.1
Biking	2,505,000	3,155,000	4,673,600	14,164,100	465.4
Rock Hunting	770,000	952,400	1,384,100	3,812,100	395.1
Sailing	483,000	654,800	1,078,500	3,812,100	689.2
Power Boating	2,777,000	3,378,200	4,799,500	13,499,600	386.1
Golfing	4,376,000	5,104,500	6,722,800	16,017,700	226.0
Tennis	1,901,000	2,232,200	3,181,700	8,988,100	372.8
Play Outdoor Games	8,073,000	8,378,500	8,556,300	8,708,300	7.9
View Outdoor Games	8,028,000	9,048,200	11,144,800	22,103,000	175.3
Water Skiing	1,524,000	1,949,500	2,983,900	9,547,700	526.5
Snow Skiing	392,000	520,900	862,800	2,762,900	604.8
Ice Skating	573,000	699,400	970,700	2,553,000	345.5
Trap Shooting	241,000	297,600	467,400	1,503,800	524.0
Archery	483,000	506,000	503,300	454,700	-5.9
Target Shooting	1,132,000	1,250,100	1,474,000	2,518,100	122.4
Horseback Riding	1,328,000	1,547,700	2,049,200	4,966,200	274.0
Wildlife Photo	513,000	670,000	1,060,600	3,497,300	581.7
Mountain Climb	1,147,000	1,235,200	1,384,100	1,923,500	67.7
Show Horses Ring	453,000	476,200	503,300	559,600	23.5
Pleasure Driving	27,947,000	29,287,600	30,828,000	35,252,900	26.1
Sightseeing	16,373,000	17,769,000	20,276,400	31,091,100	89.9
Outdoor Concert Drama	785,000	997,100	1,474,000	4,441,600	465.8
Historic	2,912,000	3,452,600	4,691,600	12,030,700	313.1
Cultural	951,000	1,145,900	1,635,800	4,651,400	389.1
Zoo	1,026,000	1,145,900	1,348,200	2,273,300	121.6
Totals	133,531,000	148,819,000	179,755,000	349,731,000	161.9

TABLE IV. 50

(44-0.00)

PROJECTED ADULT VISITOR-DAYS PARTICIPATION AT OUTDOOR RECREATION SITES BY NORTH CAROLINA HOUSEHOLDS

	1976	1986	2020
In-State Total	38,856,800	36,935,310	91,314,800
In-State Breakdown by Recreation Area:			
Mini-Park			
Playground			
Neighborhood Park	83,600	101,000	196,400
Comb. N.P. & P.G			
Playfield	351,000	424,000	825,000
Community Park			
City Park	1,086,600	1,312,500	2,553,600
District Park			
County Park	261,900	316,400	615,500
SORA Low	13,279,300	16,040,000	31,206,600
SORA Med	15,068,000	18,200,600	35,410,200
SORA High	1,159,000	1,400,000	2,723,800
III SORA Low	1,164,600	1,406,800	2,736,900
State Park	1,783,200	2,153,920	4,190,600
Destination Park	2,730,500	3,298,190	6,416,800
Unique Natural	100,300	121,200	235,700
Wilderness	22,300	27,000	52,400
Historic	1,766,500	2,133,700	4,151,300
Out-of-State Total	27,043,300	32,665,500	63,552,500
Out-of-State Breakdown by Recreation Area was not computed			
TOTAL	65,900,100	69,600,810	154,867,300

Supply Inventory and Information System — 51-0.00

The purpose of the supply and demand analysis of outdoor recreation opportunities in North Carolina was threefold. First, through the use of a statewide inventory of outdoor recreation areas, the task of identifying and quantifying significant outdoor recreation resources (which possess the capability of meeting demand for these resources) was accomplished. Second, the quantity of that demand was assessed by conducting a household survey while simultaneously identifying the users and some significant traits of their recreational behavior. The third element was that of correlating the findings of the analysis for the evaluation and establishment of planning standards.

This chapter will deal with the first aspect of this threefold purpose; the inventory and information system to assess present supply. Chapter IV dealt with the household survey of demand. Chapter VI will deal with the establishment of standards through the correlation of supply and demand data. Chapter VI will also present the needs identified through the application of the established standards.

In order to meet supply data needs of the SCORP, the treatment of two basic problems was sought in conducting and analysing the recreation areas inventory. (In the remainder of this chapter, the recreation areas inventory will be referred to as the "inventory" or NCORAI--North Carolina Outdoor Recreation Areas Inventory.) First, there was need to update and refine a similar inventory completed in 1967. Second, there was need to calculate the theoretical capacity of those sites inventoried in an effective and time-efficient manner.

Therefore, the primary purposes of the inventory and subsequent analyses were to (1) quantify, in terms of acres of land and water, the amount of existing outdoor recreation areas, and (2) determine the theoretical capacity of that supply to meet demand for outdoor recreation opportunities by the citizens of North Carolina and visitors.

Geographically, the scope of the inventory was statewide with counties as basic units for reporting purposes. Functionally, the inventory covered all significant outdoor recreation areas in both the public and private operational sectors. Included were areas ranging from mini-parks to wilderness by type and with operators involving organizations varying from Federal Government to non-profit religious interests.

Given the foregoing general goals and purposes of the inventory, a basic approach to meet the specific needs of North Carolina's Comprehensive Outdoor Recreation Planning Program was selected. Outside of these specific needs, two other basic constraints weighed heavily upon the selection of the methodology. Those were namely available time and manpower required to complete the inventory.

Previous attempts to inventory the State's significant outdoor recreation areas were based on what has been called the "component" approach to measuring the supply of such areas. That is, the process whereby each individual facility or fixture within an area is enumerated. For example, regarding a city park the inventory would, among other things, list the actual number of picnic tables and fireplaces.

A corollary to the above approach, one often referred to as the "component aggregate" approach does not involve the enumeration of individual facilities and fixtures but, moreover, the listing of specific types of areas.

In North Carolina, the supply of outdoor recreation is viewed to be composed of several elements--all of which can be assigned to one of three categories. The categories and their components are:

Recreation Areas--various parks such as mini-parks, city parks, and historic sites,

Recreation Facilities--discernable single activity sections within a park, (i.e., picnic grounds),

Recreation Fixtures and Apparatus--essentially single purpose equipment or structures within a facility, such as picnic tables and fireplaces.

Therefore, in the context of North Carolina's recreation planning program, recreation areas are the highest level in this ordering of supply elements. Recreation areas are composed of recreation facilities; the second highest level of supply elements. Finally, recreation facilities are composed of recreation fixtures and apparatus; the third highest level in the order.

Obviously some recreation areas, as viewed under this definition, may seem to be facilities. For example, on the surface a commercial campground operation might appear to cater to the sole activity of camping. Most often, however, other activities are provided for--such as swimming or outdoor games. In this case the camping "facility" becomes a recreation area offering more than one recreation supply component. This is a moot point, though, and all individual recreation sites that are included in the inventory should be considered recreation areas in the context of the hierarchy of supply elements presented above.

All of the categories are valid levels at which to measure the supply of outdoor recreation in the State; that is, measurement of supply at any given level could provide cogent indications of the amount of the applicable recreation supply elements available for the satisfaction of recreation demand. The overriding consideration was, however, which level to measure in order to provide the most meaningful data for the purposes of the State's Outdoor Recreation Planning Program?

In the field of recreation planning, it is generally understood and accepted that measurement of recreation fixtures, while useful to obtain indications of "supply" within a certain recreation area, is much too detailed to have practical application for statewide planning purposes.

There is not such concensus, however, upon the utility of either of the other two levels of measuring "supply" on a statewide basis. Within the recreation planning discipline there are two basic schools of thought regarding this subject.

On the one hand are the advocates of the component approach to measuring supply. These planners hold forth that any analysis of outdoor recreation opportunities for a given population must be predicated upon the determination of what particular activity or activities are engaged in by the individuals of the group (users). It then becomes evident with such emphasis on activity oriented assessment of demand that the only complementary method for assessing supply is the component approach. If you are comparing supply and demand for swimming, you must inventory swimming pools, beaches and lakes while asking the users how many days they went swimming during a given time period.

On the other hand there are the advocates of the component aggregate approach to measuring supply. Planners among this group contend that the component approach is too costly in terms of time and manpower required to complete such an analysis and that the results are too detailed and susceptible to gross cumulative error when applied in a statewide planning program. Conversely, they believe that the component aggregate approach (in which users are asked about what specific recreation areas they go to and where the supply is measured in terms of acres of land and water managed as certain types of recreation areas) is more feasible in terms of time and manpower requirements and that the results are adequate for statewide planning purposes.

Other rationale for choosing the component aggregate approach derives from inherent logic realized upon observing the manner in which most significant recreation supply elements are actually provided--in combinations of components rather than singularly.

It was felt that in order to provide realistic recommendations for the acquisition and development of recreation lands and waters with a minimum of superfluous detail, the needs must be presented in terms of what type of recreation areas are required and how much. Decision makers can relate more readily to the concepts of city parks and State parks than they can to activity days of demand.

Since the end result of North Carolina's SCORP must point out needs to decision makers at all levels of government and the private sector, it is necessary that these needs be presented in easily understood terms such as acres of land and water needed for specific types of recreation areas.

The component aggregate approach to measuring supply provides the simplest, most direct and time-efficient method in which to achieve the objectives of the inventory and subsequently the general SCORP objectives.

Classificaton of Areas 51-1.00

Any attempt to inventory a commodity as multifarious as recreation areas requires that some method of categorization be developed and used. In the case of the North Carolina Outdoor Recreation Areas Inventory, two primary systems of classifying data were used.

Bureau of Outdoor Recreation System for Classifying Outdoor Recreation Areas 51-1.10

The Bureau of Outdoor Recreation uses the following system for classifying all types of outdoor recreation areas:

Chapter V — 51-1.11 thru 51-1.12

Outdoor Recreation Supply

Class I--High Density Recreation Areas — 51-1.11

Physical Characteristics--Physiographic features such as topography, soil type, drainage, etc., should be adaptable to special types of intensive recreation use and development. An attractive natural setting is desirable; however, man-made settings are acceptable. There are no specific size criteria and there is great variation in size from one area to another.

Location--Usually within or near major centers of urban population but may occur within such units as national parks and forests remote from population concentrations.

Activities--Intensive day or weekend type, such as picnicking water sports, group field games, winter sports, and other activities for many people. Although high density areas are subject to heavy peakload pressure at certain times, they often sustain moderate use throughout the year.

Developments--High degree of facility development which often requires heavy investment. They are usually managed exclusively for recreation purposes. Development may include a road network, parking areas, bathing beaches and marinas, bath house, artificial lakes, playfields, and sanitary and eating facilities.

Responsibility--Commonly held under municipal, county, regional or State ownership. Many commercial resorts have similar characteristics and collectively provide a significant portion of recreation opportunities for urban population centers.

Class II--General Outdoor Recreation Areas — 51-1.12

Physical Characteristics--May have varied topography, interesting flora and fauna within a generally attractive natural and man-made setting adaptable to providing a wide range of opportunities. These areas range in size from several acres to large tracts of land.

Location--Usually more remote than Class I areas, however relatively accessible to centers of urban population and accommodate a major share of all outdoor recreation. Included are portions

of public parks and forests, public and commercial camping sites, picnic grounds, trailer parks, ski areas, resorts, streams, lakes, coastal areas, and hunting preserves.

Activities--Extensive day, weekend, and vacation use types such as camping, picnicking, fishing, hunting, water sports, winter sports, nature walks, and outdoor games.

Developments--Generally less intensive than Class I areas. Includes, but not limited to, access roads, parking areas, picnic areas, campgrounds, bathing beaches, marinas, streams, natural and/or artificial lakes. Areas are equipped with some man-made facilities, which may vary from simple to elaborate. Thus, campgrounds may have only the barest necessities for sanitation and fire control or they may have ample and carefully planned facilities such as cabins, hot and cold running water, laundry equipment, stores, museums, small libraries, entertainment, juvenile and adult playfields. Other features may include permanent tows for ski areas, fully equipped marinas, lodges, dude ranches and luxury hotels.

Responsibility--Federal, State or local governments, including regional park and recreation authorities, and private clubs and other forms of private ownership assisted by public agencies on problems of access and development of basic facilities.

Class III--Natural Environment Areas 51-1.13

Physical Characteristics--Varied and interesting land forms, lakes, streams, flora and fauna within attractive natural settings.

Location--Usually more remote from population centers than Class I and II areas and occur throughout the country and on an acreage basis are the largest class in both public and private ownership.

Activities--Extensive weekend and vacation types dependent on quality of the natural environment, such as sightseeing, hiking, nature study, picnicking, camping, swimming, boating, canoeing, fishing, hunting, and mountaineering. The primary objective is to provide for traditional recreation experience in the out-of-doors, commonly in conjunction with other resource uses. Users are encouraged to enjoy the resource "as is", in natural environment.

Developments--Access road, trails, picnic and campsite facilities and minimum sanitary facilities. There may be other compatible uses of the area such as watershed protection, water supply, grazing, lumbering, and mining provided such activities are managed so as to retain the attractiveness of the natural setting.

Responsibility--Federal, State, or local governments, including regional park and recreation authorities and private ownerships.

Class IV--Outstanding Natural Areas 51-1.14

Physical Characteristics--Outstanding natural features associated with an outdoor environment that merit special attention and care in management to insure their preservation in their natural condition. Includes individual areas of remarkable natural wonder, high scenic splendor, and features of scientific importance. One or more such areas may be part of a larger administrative unit, such as a national park or forest.

Location--Any place where such features are found.

Activities--Sightseeing, enjoyment, and study of the natural features. Kinds and intensity of use limited to the enjoyment and study of the natural attractions so as to preserve the quality of the natural features and maintain an appropriate setting. May be visited on a day, weekend, or vacation trip.

Developments--Limited to minimum development required for public enjoyment, health, safety and protection of the features. Wherever possible, access roads and facilities other than trails and sanitary facilities should be kept outside the immediate vicinity of the natural features. Visitors encouraged to walk to the feature or into the area when feasible. Improvements should harmonize with and not detract from the natural setting.

Responsibility--Public agencies (Federal, State, and local), and private landowners, with assistance from public agencies, who may identify, set aside, and manage natural features. Generally, the Federal Government assumes responsibility for the protection and management of natural areas of national significance; the States for areas of regional or State significance; and local government and private owners for areas of primarily local significance.

Class V--Primitive Areas 51-1.15

Class V-A--Includes only the areas designated under the provisions of P.L. 88-577, the Wilderness Act.

Class V-B--Includes other areas having the characteristics of this class.

Physical Characteristics--Extensive natural, wild and undeveloped areas and setting essentially removed from the effect of civilization. Essential characteristics are that the natural environment has not been disturbed by commercial utilization and that the areas are without mechanized transportation. The area must be large enough and so located as to give the user the feeling that he is enjoying a "wilderness experience". The site may vary with different physical and biological conditions and may be determined in part by the characteristics of adjacent land. Size may vary in different parts of the country. These areas are inspirational, aesthetic, scientific, and cultural assets of the highest value.

Location--V-A--Wherever established by law.
V-B--Usually remote from population centers.

Activities--Those activities that are usually done without or with a minimum of mechanized transportation or permanent shelter or other conveniences.

Developments--V-A--As prescribed in the Wilderness Act.
V-B--Usually no development of public roads, permanent habitations or recreation facilities except trails. No mechanized equipment allowed except that needed to control fire, insects, and disease. Commercial use of the area that may exist at the time of establishment should be discontinued as soon as practical.

Responsibility--V-A--Federal
V-B--Usually Federal but may also be by State agencies or private landowners (such as the high mountain country held by large timber and mining companies).

Class VI--Historic and Cultural Sites 51-1.16

Physical Characteristics--These are sites associated with the history, tradition or cultural heritage of National, State, or local interest and are of enough significance to merit preservation or restoration.

Location--The location of the feature establishes the sites.

Activities--Sightseeing, enjoyment, and study of the historic or cultural features. Kinds and intensity of use limited to this type of study and enjoyment.

Developments--Management should be limited to activities that would effect such preservation and restoration as may be necessary to protect the features from deterioration and to interpret their significance to the public. Access to the area should be adequate but on-site development limited to prevent overuse. Development should not detract from the historic or cultural values of the site.

Responsibility--Public agencies (Federal, State, and local), and private landowners who identify, set aside, and manage historic and cultural areas.

North Carolina SCORP Subclass System for Classifying Outdoor Recreation Areas — 51-1.20 51-1.30

In an effort to provide a more definite system for categorizing outdoor recreation areas, North Carolina SCORP planners undertook to expand the standard BOR classification system into a complementary system comprised of eighteeen subclasses. The specific descriptions of the subclasses are as follows:

Subclass 01--Mini-Park (BOR Class I) — 51-1.21

Basic Concept--The play lot or tot lot is a small creatively landscaped area existing or developed within densely populated and congested urban residential areas such as public housing projects. Also, it is often developed as a part of the neighborhood park or playground. These areas are usually developed for almost 100% active use with provision for at least a minimum natural or man-made buffer or perimeter barrier. In essence, it functions as a back-yard for preschool age children and their parents where adequate land is not available for individual yard and lawn areas. It provides for an aesthetic atmosphere in which parents can observe and supervise the free and imaginative play of their small pre-school age children during daytime hours.

Mini-parks and vest-pocket parks, being similar in size to the tot lots and play lots are, however, slightly different in design and concept. The former are designed to serve a broader

age group, from preschoolers to older teens. This means that in addition to the apparatus facilities for small fry there is usually a paved surface for various court games which also may be lighted. (The subclass, mini-parks, encompasses all of the above designations.)

Size--Approximately ¼ to ½ acre

Service Radius--Generally ¼ mile maximum

Features--Traditional as well as imaginative play apparatus, minimum seating accommodations, landscaped buffer, walks for access, quite often equipped with a drinking fountain, some have multi-use hard surface courts.

Activities--Free play, no structured program.

Responsibility--May be included in a municipal recreation system, but is also sometimes provided by housing authorities, private agencies, or joint efforts of any of the above.

Subclass 02--Playground (BOR I) 51-1.22

Basic Concept--The playground is located within a neighborhood often in conjunction with an elementary school and is designed to serve the active recreation needs of children six to fifteen years of age. This type area is usually developed with about 90% of the surface area for activity and the remainder for buffer. It is used primarily during the daylight hours.

Size--Approximately two to five acres

Service Radius--Generally 3/8 mile maximum

Features--Apparatus area, multi-use courts, shelter structure and open space.

Activities--May be supervised summer program only but preferably year round.

Responsibility--Usually operated by municipal recreation system but may be provided by various private agencies.

Subclass 03--Neighborhood Park (BOR I) 51-1.23

Basic Concept--This area is usually natural or landscaped open space found at various points within a city that are not suitable or desirable for other types of development. (Such as flood plains, drainage ways, etc.). It serves as a place where the passive leisure time interests and relaxation needs of all ages can be met. Usually, no more than 50% of the surface area is developed for informal active recreation with the rest being primarily natural open space.

Size--Approximately three to seven acres

Service Radius--Generally ½ mile maximum

Features--Lawn, shrubbery, walks, dispersed seating accommodations

Activities--Unstructured free play and leisure relaxation

Responsibility--Usually maintained by municipal park and/or recreation system although sometimes responsibility of municipal public works department.

Subclass 04--Combined Neighborhood Park and Playground (BOR I) 51-1.24

Basic Concept--Commonly existing or developed within built-up urban residential areas, the neighborhood park and playground offers the residents of the neighborhood an attractive, diversified landscape in conjunction with a traditional playground type area. The development of this type area is usually for no more than about 50% of the surface area being used for active recreation. In this

respect, it serves the functions of providing an aesthetically pleasing open space for the passive outdoor recreation pursuits of all ages while offering a safe apparatus and court area for the active and imaginative play of children. It is primarily used during the day and evening hours. In some cases this area may include a little league ball field or softball field. Also, may be developed in conjunction with an elementary school.

Size--Approximately three to ten acres.

Service Radius--Generally ½ mile maximum

Features--Contrasting land surfaces, vegetative growth for the provision of shade and eye appeal, apparatus and court area, functionally dispersed adult seating accommodations, small service building with rest rooms and storage, and open space for informal field sports. Occasionally minimum picnicking accommodations are included.

Activities--May include a supervised summer playground program but primarily unstructured free play and leisure time relaxation.

Responsibility--Usually operated by municipal recreation system.

Subclass 05--Playfield (BOR I) 51-1.25

Basic Concept--It is usually found or developed within urban centers of population and so located as to serve several neighborhoods comprising a community. The playfield comprises an area sufficient in size to accommodate the various field and competitive sports that form a large portion of the active outdoor recreation desires of youth and adults. This area is usually developed so that about 90% of the surface area is for active, organized recreation with about 10% for buffer. It may be developed in conjunction with junior or senior high school. Recreation opportunities offered are engaged in primarily during day and evening hours.

Size--Approximately six to twenty acres.

Service Radius--Generally 2½ miles maximum

Features--Courts and open areas for sports; perimeter landscaping, buffer zones, and walks; small service building with rest rooms, storage, and may include space for concession operation; also provision for parking and night lighting.

Activities--Organized competitive games and sports for teams or individuals, under supervision.

Responsibility--Maintained and operated by municipal recreation system in most cases, but may be provided by various private agencies.

Subclass 06--Community Park (BOR I) 51-1.26

Basic Concept--This area is located or developed within urban residential areas and serves a rather defined community (i.e., population served by a junior high school). Through the provision of a center building, field areas, hard surface areas, apparatus, open space, and landscaped areas, the community park accommodates a variety of indoor and outdoor, active and passive recreation opportunities for all ages. A recreation area of this type is usually developed so that from 75% to 90% of the surface area is for active recreation pursuits with the remaining portion being natural. It may be developed in conjunction with a junior or senior high school. Its primary use occurs during the day and evening hours.

Size--Approximately twenty to fifty acres

Service Radius--Generally 2½ miles maximum

Features--Various hard surface courts and turf fields, recreation center building, may include traditional playground area (pool). Also, provision for parking and night lighting and possibly some picnicking.

Activities--Full range of recreation opportunities under Class I day and evening use stipulations.

Responsibility--Municipal recreation systems are primary operators of this type area.

Subclass 07--City-wide Park (BOR I) 51-1.27

Basic Concept--The city-wide park is located usually within or just outside large urban areas and serves a population of up to 100,000. The basic concept is similar to that of a community park, but on a larger scale (i.e., serves area usually served by a high school). It also provides more diversified recreation opportunities such as nature interpretation, summer day camps, and a pool and/or access to a body of water. As with the community park, this type of area is usually developed so that from 75% to 90% of the surface area is for active recreation with the remaining portion natural. As with Class I areas, use is primarily restricted to day and early evening. A large city may have more than one of these type areas.

Size--Approximately 50 to 100 acres

Service Radius--Fifteen miles maximum (preferably less)

Features--A quantity of game and sport fields and courts, accommodations for water-related activities, recreation center and special use buildings, trails through undeveloped natural area.

Activities--Full range of recreation opportunities and programs meeting the stipulations of Class I day and evening use. (Limited organized overnight use optional).

Responsibility--Mainly operated by single municipality but sometimes developed through cooperative agreement of more than one municipality.

Subclass 08--District Park (BOR **II**) 51-1.28

Basic Concept--More remotely located from urban centers than Class I areas, the intensively developed district park serves the residents of one or more nonurban communities and may be developed in conjunction with a secondary county school. Through the provision of a recreation center building, field areas, hard surface areas, apparatus, open space, and landscaped areas, this type of recreation area accommodates a variety of indoor and outdoor, active and passive recreation desires of all ages. The surface area is usually developed so that from 75% to 90% is for active recreation pursuits with the remaining portion being natural. Its primary use occurs during day and evening hours.

Size--Approximately twenty to fifty acres

Service Radius--Generally fifteen to twenty miles maximum

Features--Interpretive facilties, water related and enhanced areas, natural areas, open field areas.

Activities--Self-directed outdoor experience.

Responsibility--Single county or cooperative agreement between two or more counties, single municipality or cooperative agreement between two or more municipalities, or any combination of the aforementioned.

Subclass 09--County-wide Park (BOR II) 51.1.29

Basic Concept-More remotely located from urban centers than Class I areas, the extensively developed county park serves the residents of a subregion comprising either several municipalities, a large nonurban area, or any combination of the two. The more extensive passive and active outdoor recreation desires of people for day and weekend use are accommodated (i.e., camping, picnicking, water activities, hiking, nature appreciation, etc.). These areas

are commonly developed so that 50% of the surface area is developed for extensive recreation use of the land while the remaining 50% of the land is maintained in a natural state.

Size--approximately 100 to 500 acres

Service Radius--generally 30 miles maximum

Features--Interpretive facilities, water related and enhanced areas, natural areas, open field areas.

Activities--Self-directed outdoor experience

Responsibility--Single county or cooperative agreement between two or more counties, single municipality or cooperative agreement between two or more municipalities, or any combination of the aforementioned.

Subclasses 10, 11, 12, 13--Specialized Outdoor Recreation Areas (BOR II, BOR III) 51-1.30

Basic Concept--There are a great variety of these specialized outdoor recreation areas, some of which include conservatories, flower gardens, zoos, arboretums, outdoor theaters, golf courses, ski resorts, large stadiums and sports centers. Usually these types of areas are developed to serve the interests of a particular user group for one specific recreational activity (i.e., snow skiing). The characteristics of development, period of use, season, and so forth are quite variable from site to site.

Size--No generalized figures due to the wide variance from activity to activity and site to site.

Service Radius--No generalized figures due to the wide variance from activity to activity and site to site.

Features--No generalized figures due to the wide variance from activity to activity and site to site.

Activities--No generalized figures due to the wide variance from activity to activity and site to site.

Responsibility--Both public and private sectors. (Many so-called commercial-for-profit recreation enterprises fall into this category).

Categories of Specialized Outdoor Recreation Areas--Four subclasses comprise this type of recreation area.

Subclass 10--SORA LOW (Low Intensity Use; BOR II)

-Zoos
-Golf Courses
-Boat Access Areas

Subclass 11--SORA Med (Medium Intensity Use; BOR II)

-Flower Gardens
-Arboretums
-Campgrounds
-Ski Resorts
-Amusement and Novelty Resorts

Subclass 12--SORA HIGH (High Intensity Use; BOR II)

-Outdoor Theaters
-Stadiums
-Agricultural Fairs
-Sports Centers

Subclass 13--III SORA LOW (Natural Resource Base Low Intensity Use Areas; BOR III)

-Gamelands
-Agricultural land for hunting

Subclass 14--Regional State Park (BOR III) 51-1.31

Basic Concept--Even more remote from urban centers than Class I and II areas, these sites serve residents of North Carolina on a regional basis. Emphasis is on providing a quality natural environment within a one-hour drive of regional population centers. These areas are usually developed to an extent that only 5 to 10% of the surface area is for intensive human use with the remainder being maintained in a natural state. Use is primarily of the day and weekend type although some areas provide vacation facilities.

Size--Approximately 500 to several thousand acres

Service Radius--Generally 50 miles

Features--Natural areas, water access, camping and picnicking areas, trails.

Activities--Interpretive programs, various self-directed outdoor recreation experiences.

Responsibility--State government.

Subclass 15--Destination Park/Recreation Area (BOR III) 51-1.32

Basic Concept--This is a large natural outdoor recreation area that is geographically remote from large urban centers of population. A wide range of extensive outdoor recreation activities are provided for regional, State and out-of-state patrons. Usually only 5 to 10% of the surface area is developed for intensive human use with the remaining portion being natural. Types of use range from single day outings to extended stays involving vacations of three or more days.

Size--Approximately 500 to several thousand acres

Service Radius--Constrained only to the degree of "attraction" the area offers.

Features --Vast natural areas, tourist accommodations for lodging, food, etc., extensive facilities for an overall "outdoor experience".

Activities--Interpretive programs, self-directed appreciation and use of natural environment.

Responsibility--Usually maintained by Federal or State Governments.

Subclass 16--Unique Natural Area (BOR IV) 51-1.33

Basic Concept--Unique natural areas are limited in number and irreplaceable. They include individual areas of remarkable natural wonder, high scenic splendor, or features of scientific importance. The activities are sightseeing, enjoyment and study of the natural features.

Subclass 17--Wilderness Area (BOR V) 51-1.34

Basic Concept--Wilderness areas are extensive natural, wild, and undeveloped areas in settings essentially removed from the effects of civilization. The area must be large enough and so located as to give the user the feeling that he is enjoying a "wilderness experience". Included in this subclass are such areas as National or State Wilderness Areas.

Subclass 18--Historic/Cultural Area (BOR VI) 51-1.35

Basic Concept--Historic and cultural areas are associated with the history, tradition, or cultural heritage of national, state, or local interest and are of enough significance to merit preservation or restoration. Included in this subclass are such areas as national, state, and local historic sites.

Chapter V — 51-2.00 thru 51-2.10

Outdoor Recreation Supply

Data Collection — 51-2.00

Criteria for Site Inclusion — 51-2.10

As has already been stated, the purpose of the supply inventory was to catalog virtually all significant outdoor recreation areas in the State; regardless of operator type. This included most of the traditionally designated recreation and park areas in the State as well as some of the not-so-traditional.

The criteria used to determine whether or not a site should be included in the inventory were essentially the same as those used in the 1967 inventory effort. Major exceptions were motels and highway reststops. In 1967 these areas were included in the inventory but were excluded in the 1971 effort.

Basic criteria for site inclusion in the 1971 inventory were: whether or not the site was primarily used for recreational purposes; whether or not the site was primarily oriented toward outdoor or indoor recreation activities--indoor sites were excluded; and, how significant the main site user group was--usually in terms of size and association.

Therefore, according to the above criteria, the following types of sites were included: public school sites--only the recreation acreage, such as that of a playground, was counted and then only if some sort of organized recreation program for nonschool hours existed; private schools or institutions of higher education--again only the recreational facility acreage was counted and only for those schools or colleges that had resident students; recreational acreage associated with public housing projects--such as mini-parks; resort communities--included unless an incorporated place, fairgrounds; farm ponds--only when a fishing fee was charged for profit purposes; hunting club lands--leased or otherwise; recreation areas on military bases; small airports--when used primarily for recreational, nonbusiness flying. No attempt was made to include the larger reservoirs of the State in the recreation areas inventory. This process was accomplished under a separate study of the SCORP entitled Lakes and Reservoirs for Recreation in North Carolina.

On-Site Interview Method — 51-2.20

Since four years had elapsed between the time of the last inventory in 1967 and the current effort in 1971, and, since several major discrepancies in the 1967 data had been discovered during that period of time, it was decided that a full-scale updating of the 1967 inventory would require that each known site be visited and the operator interviewed. This was a mammoth undertaking which was only made possible through the generous assistance and cooperation of the State's County Rural Development Panels--comprised basically of the local representatives of the various agencies of the United States Department of Agriculture and other similar local interests. In addition to providing the much needed manpower to complete the task, they represented the most reliable and accessible source of detailed knowledge about North Carolina counties.

The interview itself consisted of asking the site operator to answer several questions about the site. The average length of an interview was about forty-five minutes.

Questionnaire and Activity List — 51-2.30

The inventory questionnaire consisted of six major categories of responses. They were: identification and location, physical description, activity groupings, utilization, availability, and classification. Most of the responses consisted of numerical data which was coded or otherwise made suitable for automatic data processing.

Inventory data gathered on each site was stored on tape and various programs for analyzing it were created and used. In addition, certain special analyses were conducted using available "package" programs.

Chapter V	51-2.31 thru
Outdoor Recreation Supply	51-2.32

Identification and Location 51-2.31

This portion of the inventory questionnaire requested information about the name of the area; its location--in terms of adjacent roads, city or town, and county; owner and operator; access; and its relationship to the State's large urban areas.

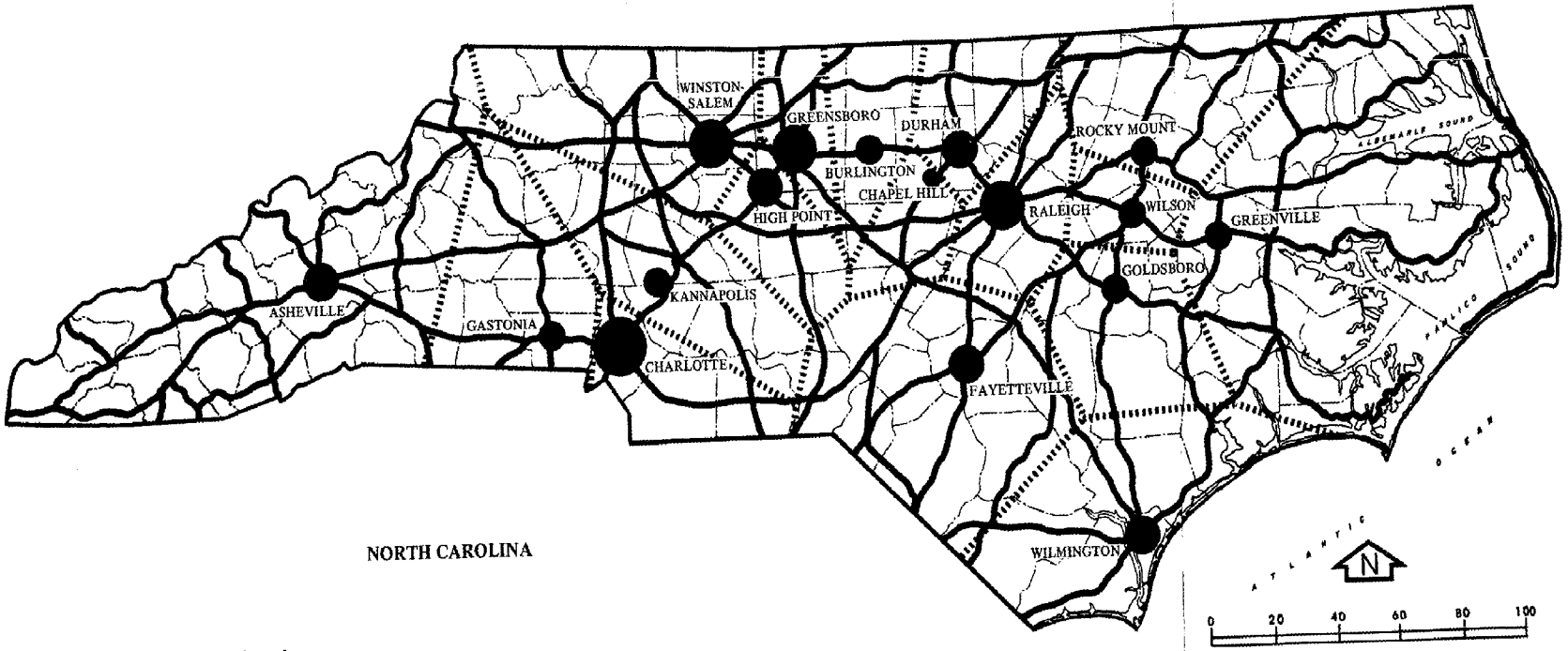
Operators were either Federal, State, local, commercial, or private.

Access to the site was categorized as either primary or secondary and either by paved roads, unpaved roads, foot trail, water, or air.

Proximity to large urban areas was defined by the relationship of the site location to the seventeen cities in the State that are 25,000 in population or over. A map of these urban areas along with major arterial highways appears as Figure V. 1. Lines indicating each urban area's "proximity zone"--portion of the State that is closer to a particular urban area than any other urban area--are also shown.

Physical Description 51-2.32

The basic data requested in this portion of this questionnaire was regarding site composition in terms of acres of land, water and wetlands. The site acreage was further categorized by type of land cover vegetation and topography. Also, an opportunity to indicate the major use of the area surrounding the site was provided in this portion of the questionnaire.



NORTH CAROLINA

Proximity zone boundary

Arterial highway

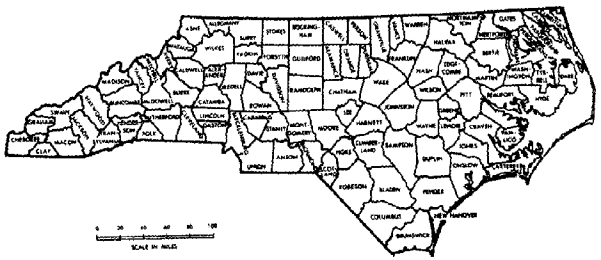


Figure V.1
(51-2.31)

NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
URBAN AREAS AND ARTERIAL HIGHWAY SYSTEM SHOWING:

URBAN PROXIMITY ZONES

Activities and Activity Groupings — 51-2.33

As has been stated earlier in this chapter, the measurement of supply and demand, as undertaken in this planning program, emphasized gaining data by type of recreation area and thus lessened the emphasis on obtaining detailed information regarding activity-oriented facilities. Nevertheless, the inventory questionnaire contained a section that sought to get a broad view of the types of activities offered at the site.

To accomplish this, the questionnaire was designed to elicit responses regarding groups of activities rather than specific individual activities. Of prime interest was a measure of the percentage of total use of the site accruing to certain groups of activities and a measure of the percentage of the site devoted to accommodating these activity groups. Three main groups of activities were utilized in this regard with a checklist provided the respondent to aid appropriate responses. Table V. 1 shows the activity groupings.

Other considerations related to the activity groups that were taken into account on the questionnaire were whether or not activities were land-related or water-related and whether or not they were spectator or participant oriented.

Utilization — 51-2.34

Generally this section of the questionnaire sought information about the use of the site. Data regarding seasonality, market area, and use types--day, overnight, or vacation--was obtained. Certain site characteristics directly associated with its utilization were also measured. Among these were measures of parking, eating, and sleeping facilties available on the site.

TABLE V. 1

(51-2.33)

THREE MAJOR ACTIVITY GROUPS USED IN NORTH CAROLINA
OUTDOOR RECREATION AREAS INVENTORY, 1971

ACTIVITY GROUPS		
Enjoyment of Natural Setting	Historic, Cultural Scientific	Sports and Athletics
horseback riding on trails	outdoor dramas	fishing
hiking with gear	historic sites	canoeing for exercise
nature walking	cultural exhibits	swimming
bird watching	visiting a zoo	water skiing
wildlife photography	other	showing or riding horses in ring
mountain climbing		sailing
picnicking		boating
camping		playing outdoor games
pleasure driving		viewing outdoor games
sightseeing		golf
biking		tennis
rock hunting		trap and skeet shooting
canoeing to view scenery		archery
other		target shooting (rifle)
		hunting
		snow skiing
		ice skating
		other

CDP 41 9/69

I D CODE

I. IDENTIFICATION AND LOCATION:

NAME OR DESIGNATION OF AREA

OWNER OF AREA	OPERATOR OF AREA
COUNTY	CITY OR TOWN

IDENTIFYING ADDRESS (STREET NAME & NO.; BOUNDARY STREETS, RFD NO., ROAD NAME, HIGHWAY NUMBER, ETC.)

OPERATOR CLASSIFICATION (CHECK ONE):

- ☐ 60 FEDERAL GOV'T.
- ☐ 50 STATE GOV'T.
- ☐ 40 LOCAL GOV'T. (SPECIFY)
  - ☐ 11 CITY
  - ☐ 12 COUNTY
  - ☐ 13 JOINT
- ☐ 21 COMMERCIAL

PRIVATE (SPECIFY)

- ☐ 31 CLUB
- ☐ 32 INDUSTRIAL
- ☐ 33 RELIGIOUS
- ☐ 34 U. F. AGENCY
- ☐ 35 OTHER _____ (SPECIFY)

ACCESS TO AREA (RANK PRIMARY ACCESS-1; SECONDARY ACCESS-2)

RANK		STREET NAME	IDENTIFICATION U. S. HIGHWAY #	N. C. HIGHWAY #	SEC. STATE #
1	☐ PAVED ROAD				

		STREET NAME	STATE SECONDARY ROAD #
2	☐ UNPAVED ROAD		

IF AREA DOES NOT FRONT ON A U. S. OR STATE HWY., INDICATE DISTANCE TO AND HWY. NUMBER OF NEAREST ROUTE. HWY. # _____ ☐ 1 U. S. ☐ 2 STATE DISTANCE FROM AREA _____

3 ☐ FOOT TRAIL 4 ☐ WATER 5 ☐ AIR

_____ NUMBER OF COUNTIES IN WHICH THE SITE IS LOCATED.

RELATIONSHIP TO LARGE URBAN POPULATION (CITY OR TOWN GREATER THAN 25,000 IN POPULATION)

RECREATION AREA WITHIN URBAN AREA 1 ☐ YES 2 ☐ NO

IF NOT, DISTANCE TO NEAREST URBAN AREA _____ MILES.

II. PHYSICAL DESCRIPTION OF AREA:

TOTAL NUMBER OF _____ 1 LAKES _____ 2 PONDS _____ 3 RIVERS _____ 4 STREAMS IN OR CONTIGUOUS TO AREA

NAMES OF ABOVE BODIES OF WATER	MEASURE

LAND COVER VEGETATION – ACRES IN FOREST _____; GRASS _____; CUTOVER _____; BRUSHLAND _____

TOPOGRAPHY – ACRES IN FLAT _____; ROLLING _____; MOUNTAINOUS _____

MAJOR USE OF SURROUNDING AREA:

- 1 ☐ COMMERCIAL
- 2 ☐ INDUSTRIAL
- 3 ☐ RESIDENTIAL
- 4 ☐ FARMLAND
- 5 ☐ RECREATION
- 6 ☐ OTHER _____

SIZE & CHARACTERISTICS OF DEVELOPMENT:

ACRES IN LAND _____; WATER _____; WETLANDS _____ TOTAL ☐

OF ABOVE TOTAL, INDICATE DEVELOPED ACRES _____; NATURAL ACRES _____.

OF TOTAL NATURAL ACRES, INDICATE HOW MUCH COULD BE DEVELOPED WITHOUT IMPAIRMENT TO AREA OR EXPERIENCE DERIVED THEREFROM OR WITHOUT CHANGING THE OVERALL AREA CLASSIFICATION _____ ACRES POTENTIAL ADDITIONAL DEVELOPMENT.

BREAKDOWN OF AREA BY BOR CLASSIFICATION SYSTEM (IN ACRES PER CLASS)

I INTENSIVE RECREATION USE AREA	_____	IV UNIQUE NATURAL AREA	_____
II GENERAL OUTDOOR RECREATION AREA	_____	V WILDERNESS AREA	_____
III NATURAL AREA	_____	VI HISTORIC & CULTURAL AREA	_____

III. ACTIVITY GROUPINGS

A. ENJOYMENT OF NATURAL SETTING:	% OF TOTAL USE	% OF TOTAL AREA
LAND RELATED		
WATER RELATED		

Figure V.2

	% OF TOTAL USE	% OF TOTAL AREA
B. HISTORIC, CULTURAL, SCIENTIFIC:		
PARTICIPANT		
SPECTATOR		
C. SPORTS AND ATHLETICS:		
SPECTATOR		
LAND RELATED		
WATER RELATED		
PARTICIPANT		
LAND RELATED		
WATER RELATED		
	100%	100%

IV. UTILIZATION

PRIMARY RECREATION SEASON – STARTING DATE _____ ENDING DATE _____

WEEK OF HIGHEST ATTENDANCE (PEAK USER WEEK) DATE _____

% OF TOTAL ANNUAL USE OCCURRING IN SEASON _____

% OF TOTAL ONE-WEEK USE OCCURRING ON WEEKEND _____

PERCENT DISTRIBUTION OF ANNUAL ATTENDANCE (TOTAL MUST BE 100%)

JANUARY _____; APRIL _____; JULY _____; OCTOBER _____; TOTAL ANNUAL ATTENDANCE

FEBRUARY _____; MAY _____; AUGUST _____; NOVEMBER _____; _____

MARCH _____; JUNE _____; SEPTEMBER _____; DECEMBER _____;

MARKET AREA (GIVE APPROXIMATE % OF ATTENDANCE FROM:)

0-3 MILES _____; 31-100 MILES _____; 201-300 MILES _____;

4-30 MILES _____; 101-200 MILES _____; OVER 300 MILES _____;

USE TYPES (GIVE APPROXIMATE % OF ATTENDANCE FOR EACH USE CATEGORY)

DAY USE _____ OVERNIGHT OR WEEKEND _____ VACATION (4 DAYS OR MORE) _____

OFFSTREET PARKING FACILITIES OTHER THAN CAMPSITES AVAILABLE WITHIN AREA.

NUMBER SPACES FOR MOTOR VEHICLES WITHOUT TRAILERS _____

NUMBER SPACES FOR MOTOR VEHICLES WITH TRAILERS _____

EATING FACILITIES AVAILABLE? 1 ☐ NO 2 ☐ YES MAXIMUM SEATING CAPACITY _____

OVERNIGHT ACCOMODATIONS

SLEEPING CAPACITY OF SITE (OTHER THAN CAMPING) _____ (IE, CABINS, MOTELS, COTTAGES, ETC.)

NUMBER OF CAMPSITES _____ NUMBER OF SHOWERS FOR CAMPERS _____

V. AVAILABILITY

AGE (CHECK ONE)

☐ 1 OPEN TO ALL AGES
☐ 2 OPEN TO YOUTH ONLY
☐ 3 OPEN TO ADULTS ONLY

SEX (CHECK ONE)

☐ 1 OPEN TO BOTH SEXES
☐ 2 MALE ONLY
☐ 3 FEMALE ONLY

FEES & CHARGES

ENTRANCE &/OR PARKING FEE 1 ☐ NO 2 ☐ YES AMOUNT _____

MAJOR ACTIVITY 1 ☐ NO 2 ☐ YES AMOUNT _____ SPECIFY TYPE ACTIVITY _____

OTHER (SPECIFY TYPE & AMOUNT) _____

VI. CLASSIFICATION

BOR CLASS _____ SUBCLASS _____

ADDITIONAL COMMENTS:

	NAME	TITLE	AGENCY
INTERVIEWER			
INTERVIEWER			

Availability — 51-2.35

The intent of this portion of the questionnaire was to gain information regarding what types of people were allowed to use the site. This delineation was obtained by using parameters of age and sex.

Availability to various income groups was felt to be tacitly implied by the existence and level of user fees charged at the site. Therefore a measure of these fees was obtained.

Classification — 51-2.36

This section of the questionnaire basically facilitated coding of the site data so that it could be tabulated and analyzed by type of area. The two classification systems mentioned earlier in this chapter were utilized in this regard.

Mapping of Sites — 51-2.40

A major goal of the 1971 inventory effort was to ensure that each site included in the inventory was located on an appropriate working map. Although complete verification of this data and its eventual publication were beyond the scope of the current SCORP, the decision to get mapped site locations was made so that the tasks of verification and publication might be accomplished as work elements of future SCORP updating programs.

The sites were mapped on standard highway maintenance maps obtained from the North Carolina State Highway Commission. These detailed maps, at a scale of two miles to the inch, proved to be excellent working base maps and will be utilized to establish the permanent mapping system.

Inventory Results 51-3.00

The data collection phase of the inventory was completed in December of 1971. Within a few months the data analysis was completed producing a variety of computer reports. A list of these reports along with a brief explanation of their contents appear in Table V. 2.

Although the inventory efforts that were a part of this SCORP updating program yielded results that are felt to be considerably more reliable than those produced in 1967, there are still certain aspects of the inventory that are weak. Some site questionnaires were returned incomplete while others were completed in every detail. Where site data was lacking or insufficient, attempts were made to obtain at least minimal data--site name, location, operator, size, and classification. Therefore, at least acreage data by type of recreation area was secured and is felt to be reliable. Other types of data that were not so complete were information on activities and utilization. Generally, however, the inventory results presented in this chapter have been found to be accurate.

In addition to the inventory of outdoor recreation areas, there was a separate and complementary effort to inventory all lakes and reservoirs in the State that were 100 acres or more in surface area. The results of that effort were reported in the SCORP Special Study entitled Lakes and Reservoirs for Recreation in North Carolina. Summary data from the report is also included in the discussion (in this chapter) of the outdoor recreation areas inventory by multi-county planning region.

TABLE V. 2

(51-3.00)

COMPUTER REPORTS GENERATED BY THE NORTH CAROLINA
OUTDOOR RECREATION AREAS INVENTORY

Program Code	Report Title	Brief Description of Data Output
RC530	Site Report	This is the basic report generated by NCORAI. It consists of one page of printout for each individual site in the inventory representing the data collected for and applicable only to that site. The types of information given for the sites included in this report are: identification and location, physical description, classification, utilization, facilities and availability.
RC540	County/Region Summary LWDNP	This report gives total acreage by county and subclass broken down into categories of land, water, wetlands developed, natural, and potential (in terms of existing sites). The data are also accumulated by multi-county planning region and subclass.
RC550	County/Region Summary by Operator Type	Similar to RC540, this report gives total acreage and count of sites by county and subclass broken down into operator categories--Federal, State, local, commercial, and private. The data are also accumulated by multi-county planning region and subclass.
RC560	General Inventory Summary	This report summarizes the majority of the information contained in RC530 Site Report by county, multi-county planning region, geographic region, and state. Generally, this report gives a count of sites falling into the various categories of site characteristics. In a few categories, total quantities of measurement are indicated rather than number of sites.
RC610	Analysis of Capacity & Present Use--County Report	This report gives capacity and attendance data by county and subclass in terms of total annual visitor days. The capacity figures are computed on a theoretical basis.
RC620	Analysis of Capacity & Present Use--Region Report	This report is the same as RC610 but is accumulated by multi-county planning regions rather than counties.

Chapter V — 51-3.10 thru 51-3.11
Outdoor Recreation Supply

Aggregate Regional Listing of Recreation Lands and Waters — 51-3.10

The inventory results were tabulated using counties as the basic unit for recording purposes. Therefore, tabulation of the inventory by multi-county planning region and also by geographic region was facilitated. The counties comprising planning regions and the planning regions comprising geographic regions are shown in Figure III. 1.

Geographic Regions — 51-3.11

The State of North Carolina is composed of three major and distinct geographic regions--Mountains, Piedmont, and Coast. Chapter III regarding State characteristics dealt with the various differences among these regions.

For purposes of the SCORP and the NCORAI, these geographic regions were defined by multi-county planning regions on a basis that approximates the true geographic regions as closely as possible.

Mountain Region--The Mountain Region of the State is composed of the Multi-County Planning Regions A, B, C, and D. It has 518 outdoor recreation areas with a total acreage of 1,192,276 acres. According to the BOR Classification System, there were 55 Class I areas, 390 Class II areas,64 Class III areas, 4 Class IV areas, 1 Class V area, and 5 Class VI areas. In terms of types of operators, 87 sites or county portions of multi-county sites were operated by Federal agencies, 16 by State agencies, 39 by local government agencies, 235 by commercial interests, and 141 by private interests. Total annual visitor day attendance at these sites was approximately 17,523,000 in 1971.

When analyzed in terms of percentage of State totals, the above data become: 20% of the State's outdoor recreation areas with 55% of the total acreage; 6% of the State's Class I areas, 29% of the Class II areas, 32% of the Class III areas, 50% of the Class IV areas, 50% of the Class V areas, 14% of the Class VI areas, 67% of the Federal sites in the State, 12% of the State sites, 5% of the local government sites, 37% of the commercial sites, 17% of the private sites; and 30% of the total 1971 annual visitor day attendance.

Table V. 3 shows how the Mountain Region of the State compares to the other two geographic regions in terms of number of sites and total acreage by BOR Class and operator type.

Piedmont Region--The Piedmont Region of the State is composed of the Multi-County Planning Regions E, F, G, H, J, and K. It has 1,189 outdoor recreation areas with a total acreage of 308,479 acres. According to the BOR Classification System, there were 600 Class I areas, 521 Class II areas, 52 Class III areas, 2 Class IV areas, 1 Class V area and 13 Class VI areas. In terms of types of operators, 20 sites or county portions of multi-county sites were operated by Federal agencies, 51 by State agencies, 494 by local government agencies, 203 by commercial interests, and 421 by private interests. Total annual visitor day attendance at these sites was approximately 27,070,000 in 1971.

When analyzed in terms of percentage of State totals, the above data become: 47% of the State's outdoor recreation areas with 14% of the total acreage; 64% of the State's Class I areas, 39% of the Class II areas, 26% of the Class III areas, 25% of the Class IV areas, 50% of the Class V areas, 49% of the Class VI areas; 16% of the Federal sites, 37% of the commercial sites, 50% of the private sites; and, 47% of the total 1971 annual visitor day attendance.

Table V. 3 shows how the Piedmont Region of the State compares to the other two geographic regions in terms of number of sites and total acreage by BOR Class and operator type.

Coastal Region--The Coastal Region of the State is composed of the Multi-County Planning Regions L, M, N, O, P, Q, and R. It has 824 outdoor recreation areas with a total acreage of 678,519 acres. According to the BOR Classification System, there were 280 Class I areas, 441 Class II areas, 84 Class III areas, 2 Class IV areas, no Class V areas, and 17 Class VI areas. In terms of types of operators, 22 sites or county portions of multi-county sites were operated by Federal agencies, 72 by State agencies, 250 by local government agencies, 197 by commercial interests, and 283 by private interests. Total annual visitor day attendance at these sites was approximately 13,032,000 in 1971.

When analyzed in terms of percentage of State totals, the above data become: 33% of the State's outdoor recreation areas with 31% of the total acreage; 30% of the State's Class I areas, 33% of the Class II areas, 42% of the Class III areas, 25% of the Class IV areas, 0% of the Class V areas, 49% of the Class VI areas; 17% of the Federal sites, 52% of the State sites, 32% of the local government sites, 31% of the commercial sites, 33% of the private sites, and, 23% of the total 1971 annual visitor day attendance.

Table V. 3 shows how the Coastal Region of the State compares to the other two geographic regions in terms of number of sites and total acreage of BOR Class and operator type.

Table V. 3

(51-3.11)

North Carolina Outdoor Recreation Areas Inventory
by BOR Class, Geographic Region, and Operator Type

BOR CLASS I

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban					1	78				
	Non-Urban			1	37	31	500	3	45	19	139
	Total			1	37	32	578	3	45	19	139
Piedmont	Urban					273	3,507			14	250
	Non-Urban					166	2,330	8	46	139	921
	Total					439	5,837	8	46	153	1,171
Coast	Urban					105	1,115			9	32
	Non-Urban					112	717			54	198
	Total					217	1,832			63	230
State	Urban					379	4,700			23	282
	Non-Urban			1	37	309	3,547	11	91	212	1,258
	Total			1	37	688	8,247	11	91	235	1,540

Table V. 3 (Cont'd)

(51-3.11)

BOR CLASS II

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban					2	151			4	614
	Non-Urban	36	2,612	6	134	4	5,731	226	46,259	111	35,773
	Total	36	2,612	6	134	6	5,882	226	46,259	115	36,387
Piedmont	Urban			2	1,317	24	7,252	26	1,526	21	3,325
	Non-Urban	6	200	24	2,467	28	7,661	162	18,945	228	33,881
	Total	6	200	26	3,784	52	14,913	188	20,471	249	37,206
Coast	Urban	1	389	1	73	6	322	6	574	9	697
	Non-Urban	7	361	46	663	23	747	176	9,859	166	46,360
	Total	8	750	47	736	29	1,069	182	10,433	175	47,057
State	Urban	1	389	3	1,390	32	7,725	32	2,100	34	4,636
	Non-Urban	49	3,173	76	3,264	55	14,139	564	75,063	505	116,014
	Total	50	3,562	79	4,654	87	21,864	596	77,163	539	120,650

TABLE V. 3 (Cont'd)

(51-3.11)

BOR CLASS III

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban										
	Non-Urban	50	1,059,741	6	26,823			4	796	4	4,470
	Total	50	1,059,741	6	26,823			4	796	4	4,470
Piedmont	Urban										
	Non-Urban	12	145,300	17	37,382			6	2,337	17	31,209
	Total	12	145,300	17	37,382			6	2,337	17	31,209
Coast	Urban							1	180		
	Non-Urban	10	285,825	16	87,561	1	22	13	12,429	43	216,788
	Total	10	285,825	16	87,561	1	22	14	12,609	43	216,788
State	Urban							1	180		
	Non-Urban	72	1,490,866	39	151,766	1	22	23	15,562	64	252,467
	Total	72	1,490,866	39	151,766	1	22	24	15,742	64	252,467

Table V. 3 (Cont'd)

(51-3.11)

BOR CLASS IV

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban										
	Non-Urban	1	3,840	1	4,200			1	13	1	251
	Total	1	3,840	1	4,200			1	13	1	251
Piedmont	Urban										
	Non-Urban			1	110			1	100		
	Total			1	110			1	100		
Coast	Urban										
	Non-Urban	2	12,200								
	Total	2	12,200								
State	Urban										
	Non-Urban	3	16,040	2	4,310			2	113	1	251
	Total	3	16,040	2	4,310			2	113	1	251

Table V. 3 (Cont'd)

(51-3.11)

BOR CLASS V

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban										
	Non-Urban	1	13,350								
	Total	1	13,350								
Piedmont	Urban										
	Non-Urban	1	7,565								
	Total	1	7,565								
Coast	Urban										
	Non-Urban										
	Total										
State	Urban										
	Non-Urban	2	20,915								
	Total	2	20,915								

Table V. 3 (Cont'd)

(51-3.11)

BOR CLASS VI

Geographic Region	Designation	OPERATOR TYPE									
		FEDERAL		STATE		LOCAL		COMMERCIAL		PRIVATE	
		sites	acres	sites	acres	sites	acres	sites	acres	sites	acres
Mountain	Urban										
	Non-Urban			2	12			1	50	2	18
	Total			2	12			1	50	2	18
Piedmont	Urban			2	336	2	52			1	15
	Non-Urban	1	220	5	192	1	40			1	1
	Total	1	220	7	558	3	92			2	16
Coast	Urban					2	23				
	Non-Urban	2	475	9	902	1	8	1	15	2	13
	Total	2	475	9	902	3	31	1	15	2	13
State	Urban			2	336	4	75			1	15
	Non-Urban	3	695	16	1,106	2	48	2	65	5	32
	Total	3	695	18	1,442	6	123	2	65	6	47

Multi-County Planning Regions 51-3.12

Region A--This region is composed of the counties of Cherokee, Clay, Graham, Haywood, Jackson, Macon, and Swain. It has 176 outdoor recreation areas with a total acreage of 729,464 acres. According to the BOR Classification System, there were 10 Class I areas, 142 Class II areas, 20 Class III areas, 1 Class IV area, no Class V areas, and 3 Class VI areas. In terms of types of operators; 37 sites were operated by Federal agencies, 2 sites by State agencies, 8 sites by local government agencies, 113 sites by commercial interests, and 16 sites by private interests. Total annual visitor days attendance at these sites was approximately 6,650,000 in 1971. Region A has a total of 29,789 surface acres in lakes within its boundaries and 33,269 surface acres within and contiguous to its boundaries. Of the total water surface acreage within its boundaries, 10,530 acres are contained in one reservoir (Fontana) in the 10,000+ size category and the Federal owner/operator classification. There are 5 reservoirs completely within the region and 1 reservoir partially within the region in the 1,000 to 9,999 acre category. The total surface area in this category is 16,546 acres which is distributed among the Federal (10,673 acres) and private (5,873 acres) owner/operator classifications. One reservoir of 595 acres and in the private owner/operator classification makes up the total acreage in the 500 to 999 acre category. One reservoir operated by Federal (200 acres) and 8 reservoirs operated by private (1,918 acres) make up the total 2,118 acres in the 100 to 499 acre category.

Region B--This region is composed of the counties of Buncombe, Henderson, Madison, and Transylvania. It has 134 outdoor recreation areas with a total acreage of 231,148 acres. According to the BOR Classification System, there were 13 Class I areas, 104 Class II areas, 15 Class III areas, 1 Class IV areas, no Class V areas, and 1 Class VI areas. In terms of types of operators; 22 sites were operated by Federal agencies, 3 sites by State agencies, 8 sites by local government agencies, 41 sites by commercial interests, and 60 sites by private interests. Total annual visitor day attendance at these sites was approximately 2,680,000 in 1971. There are only four reservoirs located in Region B. They are entirely within the regional boundary and total 1,244 acres of surface area. All of these lakes are in the 100 to 499 acre size category and are private in terms of owner/operator.

Region C--This region is composed of the counties of Cleveland, McDowell, Polk, and Rutherford. It has 90 outdoor recreation areas with a total acreage of 81,337 acres. According to the BOR Classification System, there were 13 Class I areas, 69 Class II areas, 5 Class III areas, 2 Class IV areas, no Class V areas, and 1 Class VI area. In terms of types of operators; 4 sites were operated by Federal agencies, 3 sites by State agencies, 11 sites by local government agencies, 38 sites by commercial interests, and 34 sites by private interests. Total annual visitor day attendance at these sites was approximately 2,160,000 in 1971. Region C has three reservoirs completely within the region and one partially within the region for a total of 4,772 surface acres within the region. One reservoir located on the regional boundary has 3,255 surface acres in the region and falls within the 1,000 to 9,999 acre category and the private owner/operator classification. One private lake (517 acres) and one local lake (800 acres) make up the 1,317 acres in the 500 to 999 acre category. One 200 acre private lake in the 100 to 499 acre category makes up the remaining water surface acreage in this region.

Region D--This region is composed of the counties of Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, and Yancey. It has 118 outdoor recreation areas with a total acreage of 150,328 acres. According to the BOR Classification System, there were 19 Class I areas, 75 Class II areas, 24 Class III areas, no Class IV areas, no Class V areas, and no Class VI areas. In terms of types of operators; 24 sites were operated by Federal agencies, 8 sites by State agencies, 12 sites by local government agencies, 43 sites by commercial interests, and 31 sites by private interests. Total annual visitor day attendance at these sites was approximately 6,031,000 in 1971. According to the SCORP Lakes Study, there was only one reservoir in Region D--a 1,470 surface acre reservoir under Federal ownership/operation.

Region E--This region is composed of the counties of Alexander, Burke, Caldwell, and Catawba. It has 129 outdoor recreation areas with a total acreage of 105,814 acres. According to the BOR Classification System, there were 37 Class I areas, 83 Class II areas, 7 Class III areas, 1 Class IV area, 1 Class V area, and no Class VI areas. In terms of types of operators; 12 sites were operated by Federal agencies, 5 sites by State agencies, 21 sites by local government agencies, 41 sites by commercial interests, and 50 sites by private interests. Total annual visitor day attendance at these sites was approximately 2,125,000 in 1971. Four reservoirs completely within the region and three which lie on the regional boundaries make up the total 19,790 surface acres of water inventoried in Region E. One of the reservoirs that straddle the region boundary is in the 10,000+ acre category under private ownership-operation and covers 8,000 acres in the region. The other two reservoirs that straddle the boundary are in the 1,000 to 9,999 acre category and private owner/operator classification. These, and two other reservoir completely within the region and in the same size category and owner/operator classification, cover a total of 11,515 acres within the region. The remaining water surface acreage in this region is contained in two private owner/operator reservoirs in the 100 to 499 acre category which cover a total of 275 acres.

Region F--This region is composed of the counties of Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union. It has 321 outdoor recreation areas with a total acreage of 21,284 acres. According to the BOR Classification System, there were 196 Class I areas, 115 Class II areas, 7 Class III areas, no Class IV areas, no Class V areas, and 3 Class VI areas. In terms of types of operators; no sites were operated by Federal agencies, 7 sites were operated by State agencies, 170 sites by local government agencies, 44 sites by commercial interests, and 100 sites by private interests. Total annual visitor day attendance at these sites was approximately 8,307,000 in 1971. This region contains a total of 49,990 surface acres of water which is distributed among 5

reservoirs completely within the region and 8 reservoirs which lie on the regional boundaries. Three of these which straddle the boundary make up the total 39,485 acres in the 10,000+ acre size category, and are all in the private owner/operator classification. Four reservoirs which straddle the boundary are in the 1,000 to 9,999 acre category and private owner/operator classification. These four, plus one reservoir completely within the region and in the private owner/operator classification, make up the total 9,760 acres in the 1,000 to 9,999 acre category. The one remaining reservoir (private--100 to 400 acre category) straddles the regional boundary and has 103 surface acres in the region.

Region G--This region is composed of the counties of Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin. It has 405 outdoor recreation areas with a total acreage of 83,624 acres. According to the BOR Classification System, there were 208 Class I areas, 180 Class II areas, 12 Class III areas, 1 Class IV area, no Class V areas, and 4 Class VI areas. In terms of types of operators; 5 sites were operated by Federal agencies, 13 sites by State agencies, 174 sites by local government agencies, 72 sites by commercial interests, and 141 sites by private interests. Total annual visitor day attendance at these sites was approximately 10,654,000 in 1971. The 16,434 surface water acres in the region are distributed among 13 reservoirs completely within the region and 3 reservoirs partially within the region. Of the three reservoirs partially within the region, one is in the 10,000+ acre size category with 7,785 surface acres in the region and falling in the private owner/operator classification, and two are in the 1,000 to 9,999 acre category and private owner/operator classification with a total of 1,740 surface acres. One reservoir completely within the region is in the 1,000 to 9,999 acre category (1,450 acres) and the local operator classification. Four reservoirs in the region are in the 500 to 999 acre category and under local ownership/operation with a total of 3,226 acres. The remaining 8 reservoirs and 2,143 acres are distributed with 6 reservoirs in the private owner/operator classification--all in the 100 to 499 acre size category.

Region H--This region is composed of the counties of Anson, Montgomery, Moore, and Richmond. It has 79 outdoor recreation areas with a total acreage of 54,532 acres. According to the BOR Classification System, there were 30 Class I areas, 36 Class II areas, 11 Class III areas, no Class IV areas, no Class V areas, and 2 Class VI areas. In terms of types of operators; 3 sites were operated by Federal agencies, 8 sites by State agencies, 13 sites by local government agencies, 13 sites by commercial interests, and 42 sites by private interests. Total annual visitor day attendance at these sites was approximately 640,000 in 1971. Region H has 9 reservoirs completely within its boundaries and 4 which fall partially within it, making a total of 10,393 surface acres of water inventoried within the region boundary. Three of the reservoirs partially within the region, and one completely within the region, make up the total 9,034 acres in the 1,000 to 9,999 acre category, all of which is in the private owner/operator classification. Three local reservoirs totaling 400 acres and 5 private reservoirs (one of which straddles the regional boundary) totaling 950 acres--all in the 100 to 499 acre category--make up the remaining 8 reservoirs and 1,350 surface acres of water in this region.

Region J--This region is composed of the counties of Chatham, Durham, Johnston, Lee, Orange, and Wake. It has 193 outdoor recreation areas with a total acreage of 21,527 acres. According to the BOR Classification System, there were 115 Class I areas, 69 Class II areas, 5 Class III areas, no Class IV areas, no Class V areas, and 4 Class VI areas. In terms of types of operators; no sites were operated by Federal agencies, 9 sites were operated by State agencies, 109 sites by local government agencies, 22 sites by commercial interest, and 53 sites by private interests. Total annual visitor day attendance at these sites was approximately 4,187,000 in 1971. Eleven reservoirs with a combined acreage of 3,211 are in this region. Two local (1,047 acres) and one private (650 acres) reservoirs make up the total 1,697 acres in the 500 to 999 acre size category. Two local (470 acres) and 6 private (1,044 acres in the 100 to 499 acre category) complete the reservoirs and surface acreage in this region.

Region K--This region is composed of the counties of Franklin, Granville, Person, Vance, and Warren. It has 62 outdoor recreation areas with a total acreage of 21,598 acres. According to the BOR Classification System, there were 14 Class I areas, 38 Class II areas, 10 Class III areas, no Class IV areas, no Class V areas, and no Class VI areas. In terms of types of operators; no sites were operated by Federal agencies, 9 sites were operated by State agencies, 7 sites by local government agencies, 11 sites by commercial interests, and 35 sites by private interests. Total annual visitor day attendance at these sites was approximately 1,154,000 in 1971. Region K has 4 reservoirs within its boundaries and 3 that straddle the boundaries, making up a total surface water area of 26,132 acres within the region. One Federal and one private reservoir, both partially within the region, make up the total 22,428 acres in the 10,000+ acre size category. The other reservoir partially within the region is a private operation and falls in the 1,000 to 9,999 acre category. It adds 2,810 acres of water surface to the region. Two local and two private reservoirs in the 100 to 499 acre category cover a total of 894 acres and complete the reservoirs and acreage in lakes for this region.

Region L--This region is composed of the counties of Edgecombe, Halifax, Nash, Northampton, and Wilson. It has 138 outdoor recreation areas with a total acreage of 34,124 acres. According to the BOR Classification System, there were 62 Class I areas, 60 Class II areas, 12 Class III areas, no Class IV areas, no Class V areas, and 4 Class VI areas. In terms of types of operators; no sites were operated by Federal agencies, 7 sites were operated by State agencies, 62 sites were operated by local government agencies, 16 sites by commercial interests, and 53 sites by private interests. Total annual visitor day attendance at these sites was approximately 1,500,000 in 1971. There are 6 reservoirs completely within Region L, and one reservoir partially within the region, which cover a total of 10,985 acres within the region. The reservoir which straddles the regional boundaries is in the private owner/operator classification and the 10,000+ acre size category. It has 4,700 acres in the region. Two local reservoirs in the 1,000 to 9,999 acre size

category, and completely within the region, make up the 5,760 acres in the category. The remaining 4 reservoirs and 525 acres are in the 100 to 499 acre category--1 State, 1 local, and 2 private.

Region M--This region is composed of the counties of Cumberland, Harnett, and Sampson. It has 99 outdoor recreation areas with a total acreage of 31,238 acres. According to the BOR Classification System, there were 55 Class I areas, 36 Class II areas, 7 Class III areas, no Class IV areas, no Class V areas, and 1 Class VI area. In terms of types of operators; no sites were operated by Federal agencies, 6 sites were operated by State agencies, 51 sites by local government agencies, 12 sites by commercial interests, and 30 sites by private interests. Total annual visitor day attendance at these sites was approximately 1,231,000 in 1971. There are 12 reservoirs in Region M and they cover a total of 1,755 surface acres. They are all in the 100 to 499 acre size category. Four are in the local operator classification with a total acreage of 725 acres. Eight are in the private operator classification with a total acreage of 1,050 acres.

Region N--This region is composed of the counties of Bladen, Hoke, Robeson, and Scotland. It has 94 outdoor recreation areas with a total acreage of 48,478 acres. According to the BOR Classification System, there were 33 Class I areas, 50 Class II areas, 11 Class III areas, no Class IV areas, no Class V areas, and no Class VI areas. In terms of types of operators; 3 sites were operated by Federal agencies, 10 sites by State agencies, 23 sites by local government agencies, 14 sites by commercial interests, and 44 sites by private interests. Total annual visitor day attendance at these sites was approximately 1,032,000 in 1971. The 18 reservoirs in this region cover a total of 6,383 acres, and are distributed in the 1,000 to 9,999 acre size category (2 State lakes totaling 2,486 acres), the 500 to 999 acre category (1 State lake and 1 private totaling 1,272 acres) and the 100 to 499 acre category (2 State and 12 private totaling 2,625 acres).

Region O--This region is composed of the counties of Brunswick, Columbus, New Hanover, and Pender. It has 51 outdoor recreation areas with a total acreage of 44,474 acres. According to the BOR Classification System, there were 15 Class I areas, 31 Class II areas, 2 Class III areas, no Class IV areas, no Class V areas, and 3 Class VI areas. In terms of types of operators; 1 site was operated by a Federal agency, 31 sites were operated by State agencies, 12 sites by local government agencies, 15 sites by commercial interests, and 19 sites by private interests. Total annual visitor day attendance at these sites was approximately 1,156,000 in 1971. There were 5 reservoirs totaling 10,103 acres in Region O. One State reservoir in the 1,000 to 9,999 acre category, covers a total of 8,938 acres. One reservoir is private, with a total of 750 acres in the 500 to 999 acre size category. The remaining three reservoirs are in the 100 to 499 acre category, one of which is local (115 acres) and 2 are private (300 acres total).

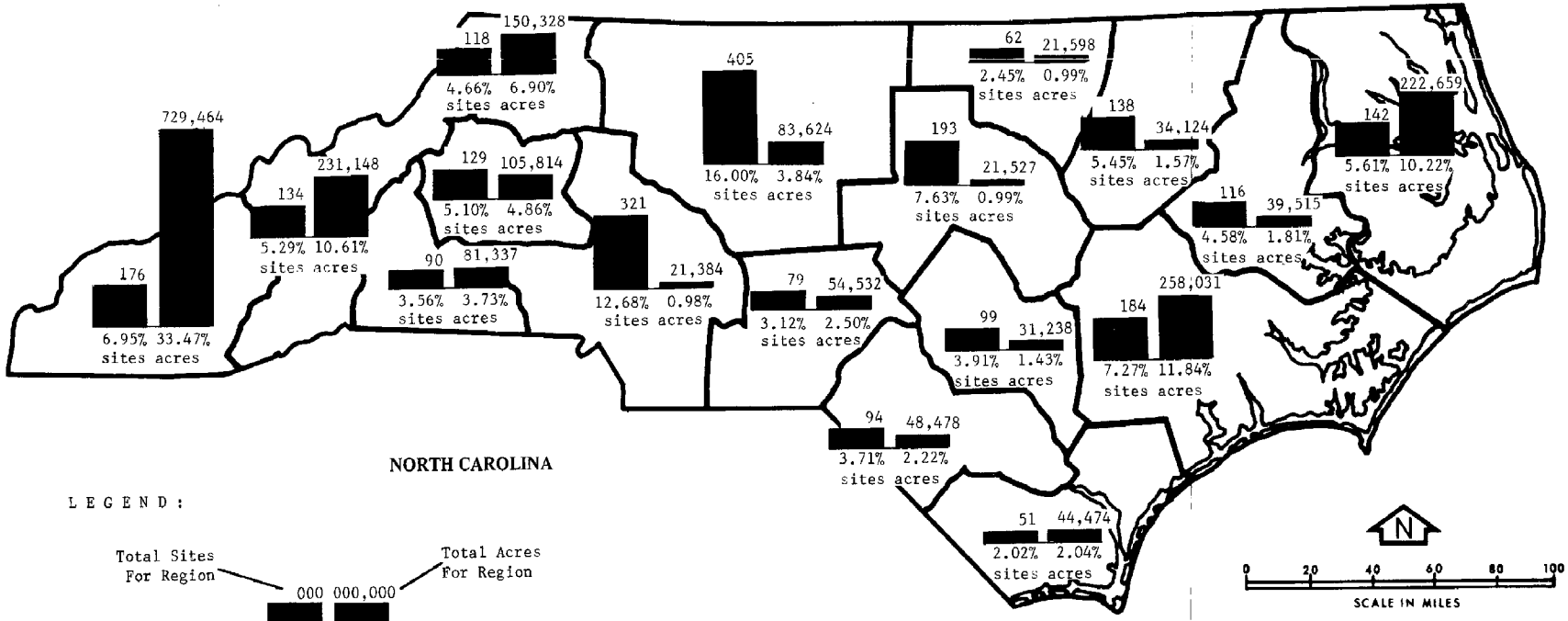
Region P--This region is composed of the counties of Carteret, Craven, Duplin, Greene, Jones, Lenoir, Onslow, Pamlico, and Wayne. It has 184 outdoor recreation areas with a total acreage of 258,031 acres. According to the BOR Classification System, there were 63 Class I areas, 106 Class II areas, 12 Class III areas, no Class IV areas, no Class V areas, and 3 Class VI areas. In terms of types of operators; 9 sites were operated by Federal agencies, 16 sites by State agencies 57 sites by local government agencies, 48 sites by commercial interests, and 54 sites by private interests. Total annual visitor day attendance at these sites was approximately 3,574,000 in 1971. This region has 2 reservoirs in the 1,000 to 9,999 acre size category. One is Federal (2,800 acres) and one is private (1,100 acres). The two reservoirs in the 500 to 999 acre category are under private operation and total 1,450 acres. Two reservoirs in the 100 to 499 acre category and under private operation total 420 acres, making a grand total for the region of six reservoirs and 5,770 surface acres in lakes.

Region Q--This region is composed of the counties of Beaufort, Bertie, Hertford, Martin, and Pitt. It has 116 outdoor recreation areas with a total acreage of 39,515 acres. According to the BOR Classification System, there were 41 Class I areas, 61 Class II areas, 12 Class III areas, no Class IV areas, no Class V areas, and 2 Class VI areas. In terms of types of operators, no sites were operated by Federal agencies, 8 sites were operated by State agencies, 36 sites by local government agencies, 27 sites by commercial interests, and 45 sites by private interests. Total annual visitor day attendance at these sites was approximately 922,000 in 1971. There is only one reservoir in Region Q--a 200-acre lake under private ownership/operation.

Region R--This region is composed of the counties of Camden, Chowan, Currituck, Dare, Gates, Hyde, Pasquotank, Perquimans, Tyrrell, and Washington. It has 142 outdoor recreation areas with a total acreage of 222,659 acres. According to the BOR Classification System, there were 11 Class I areas, 97 Class II areas, 28 Class III areas, 2 Class IV areas, no Class V areas, and 4 Class VI areas. In terms of types of operators; 9 sites were operated by Federal agencies, 21 sites by State agencies, 9 sites by local government agencies, 65 sites by commercial interests, and 38 sites by private interests. Nine reservoirs totaling 71,380 acres are located in this region. Two reservoirs--one Federal and one State--make up the majority (58,600 acres) of this acreage and are in the 10,000+ acre size category. Three reservoirs, all of which are in the private owner/operator classification, cover the 11,724 surface acres in the 1,000 to 9,999 acre category. The remaining four reservoirs and 1,056 acres are in the private owner/operator classification and the 100 to 499 acre size category.

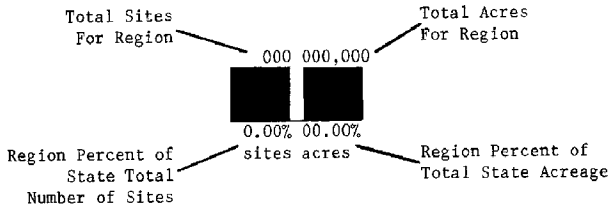
Resource Management Categories 51-3.20

One of the main goals of the inventory was to accomplish a listing of all sites according to the type of person or agency that was primarily responsible for their operation. This was necessary so that a broad picture could be obtained of how recreation areas in the State were currently being provided.



NORTH CAROLINA

L E G E N D :



State total sites.....2,531

State total acres....2,179,275

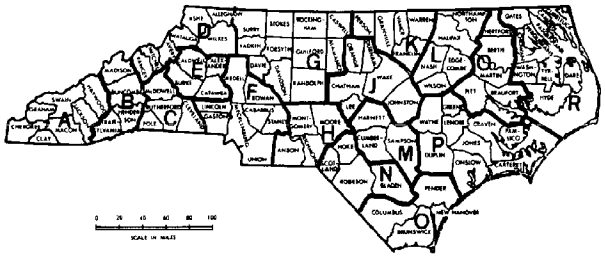


Figure V.3
(51-3.12)

NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
MULTI-COUNTY PLANNING REGIONS SHOWING:

Total Number and Acreage of Outdoor Recreation Areas with Regional Percentage of State Totals Indicated for Both Number of Areas and Acreage

TABLE V. 4

(51-3.12)

NORTH CAROLINA LAKES OF 100+ ACRES BY REGIONS (Existing)

Region	Lake	Size	Owner Operator	River Basin
A	Waterville Reservoir	340	Private	French Broad
A	Lake Junaluska	200	Private	French Broad
A	Lake Logan	100	Private	French Broad
A	Nantahala Reservoir	1,610	Private	Little Tenn.
A	Emory Reservoir	200	Federal	Little Tenn.
A	Calderwood Reservoir	200	Private	Little Tenn.
A	Wolf Creek Reservoir	175	Private	Little Tenn.
A	Bear Creek Reservoir	475	Private	Little Tenn.
A	Cedar Cliff Reservoir	145	Private	Little Tenn.
A	Cheoah Reservoir	595	Private	Little Tenn.
A	Santeetlah Reservoir	2,863	Private	Little Tenn.
A	Lake Thorpe	1,400	Private	Little Tenn.
A	Fontana Reservoir	10,530	TVA	Little Tenn.
A	Hiwassee	6,080	TVA	Hiwassee
A	Chatuge	6,950(3,470 in NC)	TVA	Hiwassee
A	Appalachia	1,123	TVA	Hiwassee
A	Mission Reservoir	283	Private	Hiwassee
B	Lake Julian(Skyland Lake)	320	Private	French Broad
B	Cascade Lake	150	Private	French Broad
B	Lake Toxaway	450	Private	Savannah
B	Summit Reservoir	324	Private	Broad
C	Lake Lure Reservoir	800	Local	Broad
C	Adger Reservoir	517	Private	Broad
C	Lake James	6,510(Part in E)	Private	Catawba
C	Lake Tahoma	200	Private	Catawba
D	W. Kerr Scott Reservoir	1,470	Federal	Yadkin-Pee Dee
E	Lake Norman	32,510(Part in F)	Private	Catawba
E	Lake Hickory	4,110	Private	Catawba
E	Lake James	6,510(Part in C)	Private	Catawba
E	Lake Rhodhiss	3,515	Private	Catawba
E	Lookout Shoals Reservoir	1,270(Part in F)	Private	Catawba
E	Icard Lake	125	Private	Catawba
E	Gunpowder(Granite) Lake	150	Private	Catawba
F	Lake Norman	32,510(Part in E)	Private	Catawba
F	Mountain Island Reservoir	3,235	Private	Catawba
F	Lookout Shoals Reservoir	1,270(Part in E)	Private	Catawba

TABLE V. 4 (Cont.)

(51-3.12)

F	Falls Lake	203(Part in H)	Private	Yadkin-Pee Dee
F	High Rock Lake	15,750(Part in G)	Private	Yadkin-Pee Dee
F	Badin Lake	5,353(Part in H)	Private	Yadkin-Pee Dee
F	Tuckertown Lake	2,560(Part in G,H)	Private	Yadkin-Pee Dee
F	Tillery Lake	5,260(Park in H)	Private	Yadkin-Pee Dee
F	Lake Monroe	140	Local	Yadkin-Pee Dee
F	Lake Lee	125	Local	Yadkin-Pee Dee
F	Lake Concord	100	Local	Yadkin-Pee Dee
F	Lake Fisher	277	Local	Yadkin-Pee Dee
F	Lake Wylie	12,455(7,100 in NC part in SC)	Private	Catawba
G	Lake Brandt	840	Local	Cape Fear
G	Burlington Reservoir	800	Local	Cape Fear
G	Lake Hamburg	300	Local	Cape Fear
G	Lake Hunt	180	Local	Cape Fear
G	Lake Jeanette	350	Local	Cape Fear
G	High Point City Lake	300	Local	Cape Fear
G	White Oak Lake	300	Private	Cape Fear
G	Lake Townsend	1,450	Local	Cape Fear
G	Metro Lake	800	Local	Cape Fear
G	Wildwood Lake	103	Private	Roanoke
G	Hyco Lake	3,750(Part in K)	Private	Roanoke
G	High Rock Lake	15,750(Part in F)	Private	Yadkin-Pee Dee
G	Tuckertown Lake	2,560(Part in F,H)	Private	Yadkin-Pee Dee
G	Lexington-Thomasville City Lake	786	Local	Yadkin-Pee Dee
G	Salem Lake	360	Local	Yadkin-Pee Dee
G	Asheboro City Lake #4	250	Local	Yadkin-Pee Dee
H	Falls Lake	203(Part in F)	Private	Yadkin-Pee Dee
H	Everetts Mill Pond	150	Private	Yadkin-Pee Dee
H	Boyd Lake	100	Private	Yadkin-Pee Dee
H	Midway Lake	150	Private	Yadkin-Pee Dee

TABLE V. 4 (Cont.)

(51-3.12)

H	Roberdell Lake	100	Private	Yadkin-Pee Dee
H	Ledbetter Lake	350	Private	Yadkin-Pee Dee
H	Badin Lake	5,353(Part in F)	Private	Yadkin-Pee Dee
H	Tuckertown Lake	2,560(Part in F,G)	Private	Yadkin-Pee Dee
H	Blewett Falls Lake	2,560	Private	Yadkin-Pee Dee
H	Tillery Lake	5,260(Part in F)	Private	Yadkin-Pee Dee
H	Wadesboro City Lake	100	Local	Yadkin-Pee Dee
H	Hamlet City Lake	100	Local	Yadkin-Pee Dee
H	Hamlet City Water Supply Reservoir (Big Lake)	200	Local	Yadkin-Pee Dee
J	University Lake	200	Local	Cape Fear
J	Holts Pond	110	Private	Neuse
J	Neuseoca Lake	110	Private	Neuse
J	Lake Wendell	100	Private	Neuse
J	Lake Johnson	174	Private	Neuse
J	Lake Silver	175	Private	Neuse
J	Holts Lake	375	Private	Neuse
J	Lake Wheeler	540	Local	Neuse
J	Lake Lee	650	Private	Neuse
J	Lake Benson	270	Local	Neuse
J	Lake Michie	507	Local	Neuse
K	Lake Butner	356	Local	Neuse
K	Hyco Lake	3,750(Part in G)	Private	Roanoke
K	Roxboro City Lake	213	Local	Roanoke
K	John H. Kerr Reservoir	48,900(Part in Va. 13,128 in NC)	Federal	Roanoke
K	Gaston Reservoir	20,300(Part in L & Va. 14,000 in NC)	Private	Roanoke
K	Devin Lake	125	Private	Tar-Pamlico
K	Island Creek Lake	200	Private	Roanoke
L	Wiggins Mill Pond	175	Local	Neuse
L	Boone's Mill Pond	100	Private	Roanoke
L	Roanoke Rapids Reservoir	4,660	Local	Roanoke
L	Whites Mill Pond	150	State	Roanoke
L	Gaston Reservoir	20,300(Part in K,Va. 14,000 in NC)	Private	Roanoke
L	Bellamys Lake	100	Private	Tar-Pamlico
L	Rocky Mount Municipal Lake	1,100	Local	Tar-Pamlico

TABLE V. 4 (Cont.)

(51-3.12)

M	Hope Mills Pond #2	150	Local	Cape Fear
M	Hope Mills Pond #1	250	Local	Cape Fear
M	Legion Pond	150	Local	Cape Fear
M	Bonnie Doone Lake	175	Local	Cape Fear
M	Upchurch's Pond	200	Private	Cape Fear
M	Rhodes Pond	150	Private	Cape Fear
M	Pope Lake	125	Private	Cape Fear
M	Sinclair Pond	175	Private	Cape Fear
M	House's Pond	100	Private	Cape Fear
M	Youngs Lake	100	Private	Cape Fear
M	Halls Pond	100	Private	Cape Fear
M	Smith Lake	100	Private	Cape Fear
N	Salters Lake	315	State	Cape Fear
N	Jones Lake	224	State	Cape Fear
N	Singletary Lake	572	State	Cape Fear
N	Black Lake	1,418	State	Cape Fear
N	White Lake	1,068	State	Cape Fear
N	Little Singletary Lake	700	Private	Cape Fear
N	Suggs Mill Pond	400	Private	Cape Fear
N	Baker's Lake	100	Private	Cape Fear
N	Mott Lake	121	Private	Cape Fear
N	Bryants Mill Pond	180	Private	Lumber
N	Warrick Mill Pond	100	Private	Lumber
N	Hayes Pond	290	Private	Lumber
N	Council Mill Pond	200	Private	Lumber
N	Hester Pond	100	Private	Lumber
N	Singletary Pond	150	Private	Lumber
N	CP&L Cooling Pond	220	Private	Lumber
N	Buie Pond	100	Private	Lumber
N	Johns Pond	125	Private	Lumber
O	Greenfield Lake	115	Local	Cape Fear
O	Orton Pond	750	Private	Cape Fear
O	McKensie Pond	100	Private	Cape Fear
O	Lake Waccamaw	8,938	State	Lumber
O	Gore Lake	200	Private	Lumber
P	Tulls Mill Pond	120	Private	Neuse
P	Long Lake	1,100	Private	Neuse
P	Little Lake	500	Private	Neuse
P	Ellis Lake	300	Private (in Nat'l Forest)	Neuse
P	Great Lake	2,800	Federal	White Oak
P	Catfish Lake	950	Private	White Oak

TABLE V. 4 (Cont.)

(51-3.12)

Q	Sheppard Mill Pond	200	Private	Tar-Pamlico
R	Merchants Mill Pond	450	Private	Chowan
R	Bennetts Mill Pond	156	Private	Chowan
R	Lake Mattamuskeet	42,000	Federal	Tar-Pamlico
R	Pungo Lake	3,000	Private	Tar-Pamlico
R	Swan Creek Lake	234	Private	Pasquotank
R	Whipping Creek Lake	216	Private	Pasquotank
R	Alligator Lake	5,544	Private	Pasquotank
R	The Frying Pan	3,180	Private	Pasquotank
R	Phelps Lake	16,600	State	Pasquotank

The basic categories that were used to classify operator types included both the public and private sectors--public being any level of government and private being all other nongovernmental providers of outdoor recreation opportunities. Within the public sector are included Federal, State, and local--city, county or regional--governmental agencies. The private sector includes both commercial, for profit, enterprises and private, nonprofit, interests.

Public Sector 51-3.21

Federal--Federal agencies directly or indirectly responsible for the provision of outdoor recreation opportunities in North Carolina include the Bureau of Sport Fisheries and Wildlife, National Park Service, Tennessee Valley Authority, United States Army Corps of Engineers, Soil Conservation Service, United States Forest Service, Farmers Home Administration, Department of Housing and Urban Development, Department of Health, Education, and Welfare, and the Department of Transportation.

In terms of present supply of outdoor recreation areas by BOR Classes, the Federal government is the only supplier of Class V areas in the State. The Federal government operates the majority of Class IV acreage in the State, and an equal percentage of the number of such sites as does the private sector (37.5%). Similarly the Federal government operates the greatest number of acres in Class III outdoor recreation areas, although the private sector operates the greater number of sites in the category. A significant percentage (29.3%) of the total acreage in Class VI sites in the State is under Federal operation. There is a small percentage of Class II sites in Federal operation.

State--There are several State agencies that directly or indirectly facilitate the provision of outdoor recreation opportunities in North Carolina. Among these are: the Office of Archives and History, Office of Forest Resources, Division of State Parks, Kerr Reservoir Development Commission, Recreation Division, State Highway Commission, Office of Water and Air Resources, Wildlife Resources Commission, Person-Caswell Lake Authority and Office of Mental Health.

Chapter V — 51-3.21 thru 51-3.22

Outdoor Recreation Supply

The State is the primary supplier of Class VI outdoor recreation areas. It also provides areas in Classes IV, III, and II. The State now operates 5.5% of the total number of outdoor recreation areas in North Carolina and 7.4% of the total acreage. There are eighteen State Parks in the State. In addition there are two natural areas administered by the Division of State Parks. The total acreage of these twenty areas is 47,000 acres. The Office of Archives and History administers the State's sixteen State Historic Sites.

Local Government--Local governmental agencies directly or indirectly providing outdoor recreation opportunities in the State are numerous and quite varied in size and function. Among the more obvious local suppliers are the sixty-plus full-time municipal recreation departments in the State and the twenty full-time county recreation departments.

Local governments in North Carolina are the primary suppliers of Class I outdoor recreation areas. They also provide Class VI, II and III areas. Local governments operate 30.9% of the total number of outdoor recreation areas in the State and 1.4% of the total acreage.

Private Sector — 51-3.22

Commercial--Commercial providers of outdoor recreation opportunities in North Carolina include operators of golf courses, campgrounds, amusement and novelty parks, theme parks, ocean piers, and marinas--as well as a myriad of other types of profit-making areas.

Private--Private providers of outdoor recreation opportunities in the State are primarily nonprofit-type interests such as religious organizations, clubs, youth agencies, and fraternal organizations.

Combined Sector--Together, the private and commercial sectors are the major suppliers of Class II outdoor recreation sites and acreages. They are also the major suppliers of Class III sites. They supply Class I areas and Class VI areas as well as a share of the Class IV sites that is equal to that of the Federal government--37.5%. They are the operators of 58.5% of the total number of outdoor recreation sites in the State making up 21.4% of the total outdoor recreation acreage. The majority of private sector outdoor recreation opportunities, both in terms of number of sites and total acreage, are provided by private (nonprofit) interests, as opposed to commercial interests.

Urban/Nonurban Distribution of Outdoor Recreation Areas — 51-3.30

Contemporary recreation planners and administrators are very concerned with the general topic of "urban recreation". It is obvious that the urban centers of our nation are growing at unprecedented rates and that such growth must have an impact upon the provision of outdoor recreation opportunities. Because of the importance of the topic and its relevance to recreation planning in North Carolina, another main objective of the inventory of recreation supply was to gauge the extent of existing urban recreation areas in terms of acreage and number of sites.

Definitions — 51-3.31

Of paramount concern in any discussion of urban recreation is the definition of an urban area--that is, the general geographic area associated with a particular population of people with characteristics that distinguish it as being urban rather than nonurban. The two basic parameters utilized in defining urban areas are (1) numbers of people--within a given geographic location, and (2) the density of that population with regard to the land area under consideration.

United States Census Definition--The Census Bureau makes a distinction between urban and rural (nonurban). Specifically, the Census Bureau definition of an urban area is any place of 2,500 persons or more incorporated or not incorporated into a city or town. The Census Bureau also provides a definition for urbanized areas--essentially places of 50,000 or more inhabitants.

North Carolina SCORP Definition--Feeling that neither of the above definitions adequately portray urban North Carolina, the decision was made to define North Carolina urban areas--for SCORP purposes--as places of 25,000 or more inhabitants. The geographic area associated with the urban population was defined as the corporate limits of the city or town with 25,000 or more resident inhabitants.

Therefore, the NCORAI considered as urban those outdoor recreation areas physically located within urban areas as defined above.

Inventory Findings — 51-3.32

Of the 2,531 outdoor recreation areas or county portions of multi-county sites in the State, 513 are located in the State's seventeen urban areas (20%). However, when viewed in terms of acreage, outdoor recreation areas located within North Carolina's urban areas account for little more than 1% of the 2,179,352 total Statewide recreation acres.

Multi-county planning Region G has more urban recreation areas (164 sites) and more urban recreation acreage (10,153 acres) than any other single region. Summary data regarding the urban-non-urban distribution of North Carolina outdoor recreation areas appears in Table V. 5.

TABLE V. 5

(51-3.22)

URBAN/NON-URBAN DISTRIBUTION OF RECREATION SITES,
NORTH CAROLINA OUTDOOR RECREATION AREAS INVENTORY, 1971

Region	Sites		Acres	
	Urban	Nonurban	Urban	Nonurban
A	a 00 b 00% c 00%	a 176 b 100% c 09%	a 00 b 00% c 00%	a 729,466 b 100% c 34%
B	a 7 b 05% c 01%	a 127 b 95% c 06%	a 834 b 00%* c 03%	a 230,307 b 100% c 11%
C	a 00 b 00% c 00%	a 90 b 100% c 04%	a 00 b 00% c 00%	a 81,338 b 100% c 04%
D	a 00 b 00% c 00%	a 118 b 100% c 06%	a 00 b 00% c 00%	a 150,333 b 100% c 07%
E	a 1 b 01% c 00%*	a 128 b 99% c 06%	a 2 b 0%* c 00%*	a 105,815 b 100% c 05%
F	a 113 b 35% c 22%	a 208 b 65% c 10%	a 8,220 b 38% c 31%	a 13,175 b 62% c 01%
G	a 164 b 40% c 32%	a 241 b 60% c 12%	a 10,153 b 12% c 39%	a 73,487 b 88% c 03%
H	a 1 b 01% c 00%*	a 78 b 99% c 04%	a 300 b 01% c 01%	a 54,233 b 99% c 03%
J	a 87 b 45% c 17%	a 106 b 55% c 05%	a 3,360 b 16% c 13%	a 18,172 b 84% c 01%

TABLE V. 5 (Cont'd)

(51-3.22)

Region	Sites		Acres	
	Urban	Nonurban	Urban	Nonurban
K	a 00 b 00% c 00%	a 62 b 100% c 03%	a 00 b 00% c 00%	a 21,600 b 100% c 01%
L	a 41 b 30% c 08%	a 97 b 70% c 05%	a 396 b 01% c 02%	a 33,733 b 99% c 02%
M	a 38 b 38% c 07%	a 61 b 62% c 03%	a 701 b 11% c 03%	a 30,538 b 89% c 01%
N	a 1 b 01% c 00%*	a 93 b 99% c 05%	a 485 b 01% c 02%	a 47,994 b 99% c 02%
O	a 11 b 22% c 02%	a 40 b 78% c 02%	a 461 b 01% c 02%	a 44,014 b 99% c 02%
P	a 25 b 14% c 05%	a 159 b 86% c 08%	a 814 b 00%* c 03%	a 257,225 b 100% c 12%
Q	a 24 b 21% c 05%	a 92 b 79% c 05%	a 548 b 01% c 02%	a 38,975 b 99% c 02%
R	a 00 b 00% c 00%	a 142 b 100% c 07%	a 00 b 0% c 00%	a 222,664 b 100% c 10%
STATE	a 513 b 20%	a 2,018 b 80%	a 26,283 b 01%	a 2,153,069 b 99%

*Note: All percentage figures are rounded to nearest one percent.

a=Actual number of sites or acres
b=Per cent distribution within region
c=Region percent of State Total (column)

Capacity Analysis

Since the overall objective of the SCORP supply and demand analysis was to effect the reasonable determination of needs for acquisition and development of outdoor recreation lands and waters, it was necessary to devise a method whereby supply data could be compared to demand data for the establishment of standards. One obvious requirement of this process, then, was the determination of supply capacity in terms compatible with those used in determining levels of demand. The compatible terms utilized for this purpose in the North Carolina SCORP were visitor days--tabulated on an annual basis. For SCORP purposes, a visitor day was defined as the presence of one person at an outdoor recreation area for any part or all of one day. Total annual visitor days were derived by tabulating attendance over a twelve month period.

Capacity analyses are generally perplexing to recreation planners. This comes from the fact that precise determinations of capacity usually require accurate measurement of all facilities on all sites--a laborious and time-consuming process. On the other hand, attempts to quantify outdoor recreation supply capacity by methods short of counting every individual facility often result in unrealistic approximations.

After considerable deliberation on the subject of capacity analysis, North Carolina SCORP planners decided to pursue a method favoring the latter of the two above techniques. This was done basically because of manpower limitations--both in terms of sheer numbers and knowledge of what was sought. Regretfully, the analysis that resulted did contain data that, if interpreted too liberally, will give an unrealistic approximation of true supply capacity. Nevertheless, the data did provide valuable guidance, if not absolute figures, for the establishment of acquisition and development standards.

Prototype Parks and Theoretical Optimum Annual Capacity 51-3.41

The basic method utilized for determining a measure of capacity for North Carolina outdoor recreation areas involved the establishment of prototype park criteria for each of the eighteen subclasses of recreation sites. Once developed, these criteria were used to establish standard optimum annual capacity figures, on a per-acre basis, for each subclass. The standard capacity values were then applied to the inventory data to derive a theoretical optimum annual capacity figure for each site in the inventory.

Prototype park criteria were established by utilizing currently available recreation facility standards and standards for the classification of outdoor recreation areas. Sources heavily used in this regard included standards publications of the Bureau of Outdoor Recreation and the National Recreation and Park Association.

The selection process for choosing the most appropriate facility standards from the myriad considered involved the group judgment of a number of North Carolina recreation professionals. The paramount concern of the group was to devise a set of criteria for each subclass prototype that would represent optimum development and utilization--not the maximum possible. It was through this philosophy that consideration for quality recreation experience was attained.

Assumptions and Limitations--The capacity methodology, as described above, naturally gave rise to important assumptions and limitations regarding its application. The two primary assumptions made involve the accuracy of various acreage figures reported in the inventory and the actual degree of development at existing recreation sites.

The first assumption is that the reported data in the inventory regarding total site acreage, developed acreage, and acreage for potential development are real and accurate. Since these figures are used directly in determining the site's capacity through the

application of the per-acre capacity standard, any major discrepancies in the reported data and actual data will result in errors in the theoretical optimum annual site capacity determination.

The second assumption is in regard to the correlation of the theoretical optimum annual capacity of a site and its actual annual optimum capacity. In order for the theoretical capacity figure to closely approximate the actual capacity figure, the actual degree of development on the inventoried site must closely simulate that degree of development reflected in the prototype criteria for its subclass--both in numbers and types of facilities. Anyone interpreting the capacity figures developed in this SCORP effort as being actual optimum annual figures, must be willing to assume that the above degree of correlation exists. Otherwise, it is generally felt that the theoretical capacity figures thus derived overestimate actual site capacity--the degree of overestimation being considerable for some subclasses and negligible for others.

Factors in Prototype Criteria--The basic factors considered in the derivation and application of the prototype park criteria included classification of the area, per cent of the area developed, size of the areas in acres, types of development, length of primary recreation season, and per cent of total annual attendance occurring during the primary season. These factors had values that varied from subclass to subclass. The values were incorporated into a series of simple equations that converted them into a single optimum annual capacity figure on a per-acre basis for each subclass. The per-acre figures were either based upon developed acreage or total acreage of the site--depending on the subclass. The figures thus derived appear in Table V. 6.

BOR Class Results by Region

The results of the capacity analysis are presented in Table V. 7 by BOR Class and Multi-County Planning Region. This data should be viewed in the light of the cautions given in the section on assumptions and limitations. In the column listing reported annual attendance, the figures are from all inventoried sites that reported attendance

plus averaged figures for sites failing to answer the attendance question on the inventory questionnaire. The figures on capacity of potential development consider only the potential development within existing sites--as perceived by the site owner/operator.

TABLE V. 6

(51-3.41)

SUBCLASS OPTIMUM ANNUAL CAPACITY FIGURES
UTILIZED TO DETERMINE SITE THEORETICAL CAPACITY

Subclass	Annual Capacity Per Developed Acre	Annual Capacity Per Total Acre
Mini-Park	64,000.00	N.A.
Playground	4,166.66	N.A.
Neighborhood Park	3,200.00	N.A.
Combined Neighborhood Park and Playground	14,823.53	N.A.
Playfield	5,720.59	N.A.
Community Park	12,112.45	N.A.
City Park	13,399.62	N.A.
District Park	15,674.55	N.A.
County Park	3,002.71	N.A.
SORA LOW	688.24	N.A.
SORA MED	6,652.94	N.A.
SORA HIGH	43,636.36	N.A.
III SORA LOW	N.A.	1.90
State Park	860.44	53.23
Destination Park	N.A.	6.84
Unique Natural Area	N.A.	100.45
Wilderness Area	N.A.	0.86
Historic/Cultural Area	3,988.87	N.A.

TABLE V. 7

(51-3.41)

REGIONAL ANALYSIS OF CAPACITY AND PRESENT USE BY BOR CLASS

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
A	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	484,883	117,150	370,233	60,562	430,795
		Total	484,883	117,150	370,233	60,562	430,795
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	15,281,012	1,321,364	14,134,265	7,320,150	21,454,415
		Total	15,281,012	1,321,364	14,134,265	7,320,150	21,454,415
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	2,742,116	4,909,009	1,143,038	-0-	1,143,038
		Total	2,742,116	4,909,009	1,143,038	-0-	1,143,038
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	385,728	21,450	364,278	-0-	364,278
		Total	385,728	21,450	364,278	-0-	364,278
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	134,824	283,378	61,024	39,889	100,913
		Total	134,824	283,378	61,024	39,889	100,913
A	TOTAL	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	19,028,563	6,652,351	16,072,838	7,420,601	23,493,439
		Total	19,028,563	6,652,351	16,072,838	7,420,601	23,493,439

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
B	I	Urban	803,977	100,000	703,977	133,996	837,973
		Non-Urban	504,252	63,756	448,872	229,244	678,116
		Total	1,308,229	163,756	1,152,849	363,240	1,516,089
	II	Urban	1,766,156	170,050	1,596,106	181,236	1,777,342
		Non-Urban	28,708,779	770,674	27,942,827	17,563,016	45,505,843
		Total	30,474,935	940,724	29,538,933	17,744,252	47,283,185
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	395,356	1,548,263	349,818	-0-	349,818
		Total	395,356	1,548,263	349,818	-0-	349,818
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,306	10,000	-0-	-0-	-0-
		Total	1,306	10,000	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	19,944	16,000	3,944	-0-	3,944
		Total	19,944	16,000	3,944	-0-	3,944
B	Urban	Urban	2,570,133	270,050	2,300,083	315,232	2,615,315
		Non-Urban	29,629,637	2,408,693	28,745,461	17,792,260	46,537,721
		Total	32,199,770	2,678,743	31,045,544	18,107,492	49,153,036

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theroetical Total Annual Potential Capacity
C	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	2,307,630	828,898	1,594,262	135,303	1,729,565
		Total	2,307,630	828,898	1,594,262	135,303	1,729,565
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	18,994,714	841,621	18,260,488	8,948,995	27,209,483
		Total	18,994,714	841,621	18,260,488	8,948,995	27,209,483
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	137,615	442,215	126,166	-0-	126,166
		Total	137,615	442,215	126,166	-0-	126,166
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	447,103	44,000	403,103	-0-	403,103
		Total	447,103	44,000	403,103	-0-	403,103
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	-0-	4,000	-0-	-0-	-0-
		Total	-0-	4,000	-0-	-0-	-0-
C	TOTAL	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	21,887,062	2,160,734	20,384,019	9,084,298	29,468,317
		Total	21,887,062	2,160,734	20,384,019	9,084,298	29,468,317

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
D	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,176,689	205,659	980,695	236,087	1,216,782
		Total	1,176,689	205,659	980,695	236,087	1,216,782
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	38,584,877	1,826,988	36,828,028	23,804,922	60,632,950
		Total	38,584,877	1,826,988	36,828,028	23,804,922	60,632,950
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	709,054	3,998,159	465,286	1,722,601	2,187,887
		Total	709,054	3,998,159	565,286	1,722,601	2,187,887
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	-0-	-0-	-0-	-0-	-0-	-0-
D	TOTAL	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	40,470,620	6,030,806	38,274,009	25,763,610	64,037,619
		Total	40,470,620	6,030,806	38,274,009	25,763,610	64,037,619

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
E	I	Urban	6,250	10,438	-0-	-0-	-0-
		Non-Urban	2,715,747	562,131	2,277,012	250,796	2,527,808
		Total	2,721,997	572,569	2,277,012	250,796	2,527,808
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	10,307,978	1,266,932	9,613,374	5,588,199	15,201,573
		Total	10,307,978	1,266,932	9,613,374	5,588,199	15,201,573
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	177,079	185,240	168,954	-0-	168,954
		Total	177,079	185,240	168,954	-0-	168,954
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	10,045	100,000	-0-	-0-	-0-
		Total	10,045	100,000	-0-	-0-	-0-
	V	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	6,506	500	6,006	-0-	6,006
		Total	6,506	500	6,006	-0-	6,006
	VI	-0-	-0-	-0-	-0-	-0-	-0-
E	TOTAL	Urban	6,250	10,438	-0-	-0-	-0-
		Non-Urban	13,217,355	2,114,803	12,065,346	5,838,995	17,904,341
		Total	13,223,605	2,125,241	12,065,346	5,838,995	17,904,341

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
F	I	Urban	10,094,231	3,951,494	6,950,338	88,941	7,039,279
		Non-Urban	4,182,216	1,674,563	2,973,606	786,374	3,759,980
		Total	14,276,447	5,626,057	9,923,944	875,315	10,799,259
	II	Urban	3,160,761	389,672	2,797,453	345,953	3,143,406
		Non-Urban	32,930,111	1,674,761	31,368,066	6,368,006	37,736,072
		Total	36,090,872	2,064,433	34,165,519	6,713,959	40,879,478
	III	Urban	363,106	428,000	-0-	-0-	-0-
		Non-Urban	31,374	99,793	2,350	43,022	45,372
		Total	394,480	527,793	2,350	43,022	45,372
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	157,959	88,983	134,017	-0-	134,017
		Total	157,959	88,983	134,017	-0-	134,017
F	TOTAL	Urban	13,618,098	4,769,166	9,747,791	434,894	10,182,685
		Non-Urban	37,301,660	3,538,100	34,478,039	7,197,402	41,675,441
		Total	50,919,758	8,307,266	44,225,830	7,632,296	51,858,126

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
G	I	Urban	12,900,585	3,847,505	9,940,286	2,751,489	12,691,775
		Non-Urban	15,380,813	1,217,297	4,516,722	1,565,814	6,082,536
		Total	18,281,398	5,064,802	14,457,008	4,317,303	18,774,311
	II	Urban	12,716,501	2,288,586	11,299,292	1,487,895	12,787,187
		Non-Urban	27,565,805	2,015,325	25,784,548	40,073,199	65,857,747
		Total	40,282,306	4,303,911	37,083,840	41,561,094	78,644,934
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	146,855	369,388	42,448	-0-	42,448
		Total	146,855	369,388	42,448	-0-	42,448
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	11,050	27,207	-0-	-0-	-0-
		Total	11,050	27,207	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	207,422	8,344	199,078	-0-	199,078
		Non-Urban	179,499	880,820	69,722	59,833	129,555
		Total	386,921	889,164	268,800	59,833	328,633
G	TOTAL	Urban	25,824,508	6,144,435	21,438,656	4,239,384	25,678,040
		Non-Urban	33,284,022	4,510,037	30,413,440	41,698,846	72,112,286
		Total	59,108,530	10,654,472	51,852,096	45,938,230	97,790,326

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
H	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,019,398	154,826	880,665	14,824	895,489
		Total	1,019,398	154,826	880,665	14,824	895,489
	II	Urban	34,412	800	33,612	137,648	171,260
		Non-Urban	7,298,533	226,123	7,089,066	1,164,807	8,253,873
		Total	7,332,945	226,923	7,122,678	1,302,455	8,425,133
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	88,572	196,667	15,839	-0-	15,839
		Total	88,572	196,667	15,839	-0-	15,839
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	113,682	64,000	49,682	-0-	49,682
		Total	113,682	64,000	49,682	-0-	49,682
H	TOTAL	Urban	34,412	800	33,612	137,648	171,260
		Non-Urban	8,520,185	641,616	8,035,252	1,179,631	9,214,883
		Total	8,554,597	642,416	8,068,864	1,317,279	9,386,143

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
J	I	Urban	6,210,144	2,700,566	3,876,584	621,259	4,497,843
		Non-Urban	8,433,135	398,520	8,080,455	161,773	8,242,228
		Total	14,643,279	3,099,086	11,957,039	783,032	12,740,071
	II	Urban	1,207,888	130,969	1,090,405	198,057	1,288,462
		Non-Urban	6,938,648	383,101	6,566,978	3,495,281	10,062,259
		Total	8,146,536	514,070	7,657,383	3,693,338	11,350,721
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	180,182	363,286	5,455	-0-	5,455
		Total	180,182	363,286	5,455	-0-	5,455
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	1,432,004	205,377	1,320,101	-0-	1,320,101
		Non-Urban	203,432	5,000	198,432	-0-	198,432
		Total	1,635,436	210,377	1,518,533	-0-	1,518,533
J	TOTAL	Urban	8,850,036	3,036,912	6,287,090	819,316	7,106,406
		Non-Urban	15,755,397	1,149,907	14,851,320	3,657,054	18,508,374
		Total	24,605,433	4,186,819	21,138,410	4,476,370	25,614,780

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
K	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	463,021	42,070	425,121	52,865	477,986
		Total	463,021	42,070	425,121	52,865	477,986
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	5,583,593	450,426	5,144,369	4,225,536	9,369,905
		Total	5,583,593	450,426	5,144,369	4,225,536	9,369,905
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	817,022	661,300	510,496	335,572	846,068
		Total	817,022	661,300	510,496	335,572	846,068
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	-0-	-0-	-0-	-0-	-0-	-0-
K	TOTAL	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	6,863,636	1,153,796	6,079,986	4,613,973	10,693,959
		Total	6,863,636	1,153,796	6,079,986	4,613,973	10,693,959

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
L	I	Urban	3,379,465	458,745	2,971,395	-0-	2,971,395
		Non-Urban	780,281	491,940	466,414	425,054	891,468
		Total	4,159,746	950,685	3,437,809	425,054	3,862,863
	II	Urban	1,514,181	65,035	1,449,146	-0-	1,449,146
		Non-Urban	7,116,054	393,196	6,778,871	1,366,121	8,144,992
		Total	8,630,235	458,231	8,228,017	1,366,121	9,594,138
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	55,328	3,075	52,253	-0-	52,253
		Total	55,328	3,075	52,253	-0-	52,253
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	7,978	75,000	-0-	-0-	-0-
		Non-Urban	127,644	25,806	102,849	-0-	102,849
		Total	135,622	100,806	102,849	-0-	102,849
L	TOTAL	Urban	4,901,624	598,780	4,429,541	-0-	4,420,541
		Non-Urban	8,079,307	914,017	7,400,387	1,791,175	9,191,562
		Total	12,980,931	1,512,797	11,820,928	1,791,175	13,612,103

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
M	I	Urban	1,811,960	344,750	1,467,570	-0-	1,467,570
		Non-Urban	888,407	287,860	683,324	48,638	731,962
		Total	2,700,367	632,610	2,150,894	48,638	2,199,532
	II	Urban	1,466,848	161,500	1,440,334	-0-	1,440,334
		Non-Urban	2,845,364	412,614	2,486,952	575,481	3,062,433
		Total	4,312,212	574,114	3,927,286	575,481	4,502,767
	III	Urban	342	350	-0-	-0-	-0-
		Non-Urban	47,747	23,359	31,772	-0-	31,772
		Total	48,089	23,709	31,772	-0-	31,772
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	21,939	1,000	20,939	-0-	20,939
		Non-Urban	-0-	-0-	-0-	-0-	-0-
		Total	21,939	1,000	20,939	-0-	20,939
M	TOTAL	Urban	3,301,089	507,600	2,928,843	-0-	2,928,843
		Non-Urban	3,781,518	723,833	3,202,048	624,119	3,826,167
		Total	7,082,607	1,231,433	6,130,891	624,119	6,755,010

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
N	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,121,794	246,418	897,056	156,079	1,053,135
		Total	1,121,794	246,418	897,056	156,079	1,053,135
	II	Urban	1,376	1,600	-0-	249,831	249,831
		Non-Urban	4,094,605	558,771	3,581,714	1,701,277	5,282,991
		Total	4,095,981	560,371	3,581,714	1,951,108	5,532,822
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	89,214	225,703	66,420	-0-	66,420
		Total	89,214	225,703	66,420	-0-	66,420
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	-0-	-0-	-0-	-0-	-0-	-0-
N	TOTAL	Urban	1,376	1,600	-0-	249,831	249,831
		Non-Urban	5,305,613	1,030,892	4,545,190	1,857,356	6,402,546
		Total	5,306,989	1,032,492	4,545,190	2,107,187	6,652,377

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity Of Potential Development	Theoretical Total Annual Potential Capacity
O	I	Urban	4,003,885	515,000	3,503,076	-0-	3,503,076
		Non-Urban	88,671	33,000	56,504	-0-	56,504
		Total	4,092,556	548,000	3,559,580	-0-	3,559,580
	II	Urban	351,289	70,000	281,289	-0-	281,289
		Non-Urban	11,909,669	259,178	11,690,604	4,144,829	15,835,433
		Total	12,260,958	329,178	11,971,893	4,144,829	16,116,722
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	44,813	44,540	18,500	-0-	18,500
		Total	44,813	44,540	18,500	-0-	18,500
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	418,831	234,136	184,695	-0-	184,695
		Total	418,831	234,136	184,695	-0-	184,695
O	TOTAL	Urban	4,355,174	585,000	3,784,365	-0-	3,784,365
		Non-Urban	12,461,984	570,854	11,950,303	4,144,829	16,095,132
		Total	16,817,158	1,155,854	15,734,668	4,144,829	19,879,497

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
P	I	Urban	1,575,806	514,216	1,070,090	104,623	1,174,713
		Non-Urban	1,240,391	1,461,115	306,029	522,803	828,832
		Total	2,816,197	1,975,331	1,376,119	627,426	2,003,545
	II	Urban	6,193,989	49,300	6,149,001	31,349	6,180,350
		Non-Urban	15,604,497	693,432	15,008,904	8,307,174	23,316,078
		Total	21,798,486	742,732	21,157,905	8,338,523	29,496,428
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	533,162	777,828	463,007	51,626	514,633
		Total	533,162	777,828	463,007	51,626	514,633
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	191,466	78,154	122,251	-0-	122,251
		Total	191,466	78,154	122,251	-0-	122,251
P	TOTAL	Urban	7,769,795	563,516	7,219,091	135,972	7,355,063
		Non-Urban	17,569,516	3,010,529	15,900,191	8,881,603	24,781,794
		Total	25,339,311	3,574,045	23,119,282	9,017,575	32,136,857

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
Q	I	Urban	432,905	209,158	263,431	22,400	285,831
		Non-Urban	731,324	140,888	628,003	346,249	974,252
		Total	1,164,229	350,046	891,434	368,649	1,260,083
	II	Urban	4,284,408	194,000	4,095,032	45,012	4,140,044
		Non-Urban	5,408,777	340,968	5,163,314	457,446	5,620,760
		Total	9,693,185	534,968	9,258,346	502,458	9,760,804
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	69,884	21,923	54,349	-0-	54,349
		Total	69,884	21,923	54,349	-0-	54,349
	IV	-0-	-0-	-0-	-0-	-0-	-0-
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	81,772	15,000	66,772	-0-	66,772
		Total	81,772	15,000	66,772	-0-	66,772
Q	TOTAL	Urban	4,717,313	403,158	4,358,463	67,412	4,425,875
		Non-Urban	6,291,757	518,779	5,912,438	803,695	6,716,133
		Total	11,009,070	921,937	10,270,901	871,107	11,142,008

TABLE V. 7 (Cont.)

(51-3.41)

Region	BOR Class	Location	Theoretical Annual Site Capacity	Reported Annual Attendance	Unused Annual Capacity at Present Development	Annual Capacity of Potential Development	Theoretical Total Annual Potential Capacity
R	I	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	196,519	107,938	124,269	221,309	345,578
		Total	196,519	107,938	124,269	221,309	345,578
	II	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	2,881,891	527,274	2,501,937	309,363	2,811,300
		Total	2,881,891	527,274	2,501,937	309,363	2,811,300
	III	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	494,523	2,320,694	144,314	-0-	144,314
		Total	494,523	2,320,694	144,314	-0-	144,314
	IV	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,225,490	15,000	1,210,490	-0-	1,210,490
		Total	1,225,490	15,000	1,210,490	-0-	1,210,490
	V	-0-	-0-	-0-	-0-	-0-	-0-
	VI	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	1,483,860	632,656	906,677	-0-	906,677
		Total	1,483,860	632,656	906,677	-0-	906,677
R	TOTAL	Urban	-0-	-0-	-0-	-0-	-0-
		Non-Urban	6,282,283	3,603,562	4,887,687	530,672	5,418,359
		Total	6,282,283	3,603,562	4,887,687	530,672	5,418,359

Chapter V — 51-4.00 thru 51-4.10
Outdoor Recreation Supply

System Continuity — 51-4.00

In the few years that North Carolina has had an inventory of outdoor recreation areas, (since 1967) the number of periodic requests for this information from all types of recreation interests has increased significantly. These requests originate from such public agencies as regional Councils of Government and provide data input into such planning efforts as the regional open space/recreation plans.

Due to the utility of the data at levels other than State government, it is desirable that the invetory system be continually updated and refined.

System Maintenance — 51-4.10

As with any cataloging effort, an inventory, like the census, is valid only for the moment in time that the data is collected. Since it is impractical to maintain an instantaneous accounting of all outdoor recreation areas in the State, periodic updates of the data must suffice.

The efforts to inventory outdoor recreation areas in North Carolina undertaken in 1967 and 1971 represented major "one-time" attempts. Due to the difficulties encountered and the magnitude of these one-shot attempts, the advantages of partially updating the inventory periodically became obvious. The main advantages would be in terms of manpower and time required for such attempts compared to that required to update the entire inventory each year.

Therefore, it was decided that the inventory should be partially updated each year with a complete cycle of updating occurring every five years. In essence, this means that each year approximately twenty counties will be considered in an updating effort. In addition to this, any known new areas that come into existence, anywhere in the State, will be added to the inventory.

The yearly task of updating portions of the inventory will be primarily undertaken by Recreation Consultants of the Recreation Division, Department of Natural and Economic Resources, located in the Department's regional area offices. In addition, the various full-time municipal and county recreation departments located throughout the State will be asked to update the inventory of sites in their jurisdiction once every five years in accordance with the master schedule for updating different counties (Table VIII. 1). Attempts will also be made to involve other local and regional organizations as the need arises. However, the major responsibility for updating will rest with the Recreation Division and municipal/county recreation departments.

The site records that are updated each year will be prepared for automatic data processing and used to edit the existing inventory master tape accommodating the necessary adding or deleting of data. Once completed, the updated inventory master tape will be processed to produce the various new reports of the NCORAI system. As with the current inventory, these updated reports will be distributed to:

- County agents of the United States Department of Agriculture
- Municipal and County Recreation Departments
- Regional Government Planning Agencies
- Regional Offices, Department of Natural and Economic Resources
- Other interested agencies and persons by special arrangement

System Refinement — 51-4.20

In addition to annual efforts to update portions of the data base of the North Carolina Outdoor Recreation Areas Inventory, attempts will be made to make mechanical and procedural adjustments in the system to facilitate reliable and efficient system maintenance.

Among the first of these adjustment will be formulating changes in both the questionnaire and the master computer tape to obviate inefficient and cumbersome format arrangements that presently exist. These will generally be minor changes that should correct certain undesirable conditions experienced in the compilation of the 1971 inventory.

Other considerations will include an analysis of alternative data gathering techniques such as questionnaire mailouts with on-site interview follow-ups as necessary. Any and all techniques that offer possibilities for improving the efficiency of the system will be explored.

A basic goal of the refinement efforts will be the validation and publication of inventory maps. These will be coordinated with the regional mapping efforts of the Office of State Planning, Department of Administration. As such, this will be a major work element of the next SCORP program for North Carolina.

Potential Recreation Lands and Waters 52-0.00

Potential recreation resources are considered to be lands and waters that are presently undeveloped and that are of such a nature that their development for recreation would be desirable. Such lands may also have worth to other competing land uses such as industrial development or development for housing.

The main characteristics of potential recreation lands and waters that make them desirable for such development are the natural resource traits that complement various recreation pursuits and the amount of monetary investment required for their development. In the absence of the latter characteristics of potential recreation resources, the entire land area of the State must be considered as a potential recreation resource--any of it developable when price is not considered. This is a mute point, however, as price is always a factor in any land development.

Potential recreation resources are becoming more scarce because of this price consideration. Nonrecreation development interests can, in most cases, afford to pay a higher price for land resources than can recreation interests. The reason is simply that the rate of return on investment, in dollars, is greater for nonrecreational developments--even at considerably higher levels of initial investment. It is within such a framework that attrition of potential recreation resources continues at increasing rates as it has for several decades.

One of the primary methods of combating this situation has been the acquisition of potential resources as funds become available. In order to acquire more resources, then, development of those resources already acquired has often been minimal--a condition that creates potential capacity for additional development of existing recreation resources.

With the philosophy of potential recreation resources outlined above, both potential resources for acquisition and the development potential of existing acquired recreation resources was considered in the analysis of recreation supply.

Chapter V	52-1.00 thru
Outdoor Recreation Supply	52-2.00

Potential of Present Supply 52-1.00

The main thrust of the potentials analysis of the current SCORP focused on a capacity analysis of potential for development of present supply.

The method for quantifying the amount of potential development involved asking a question on the supply inventory form about how much of the existing site the operator felt could be developed if the funds were available. Approximately 2.5% of the existing acreage was thus determined to have potential for development.

Analyzed in terms of capacity, this potential development, if done according to subclass prototype park standards, could provide an additional annual optimum capacity of approximately 40%.

Additional Recreation Resource Potentials 52-2.00

No specific efforts to inventory potential recreation resources for new acquisition were undertaken as part of this SCORP program. However, efforts by other State and Federal agencies in this regard were found.

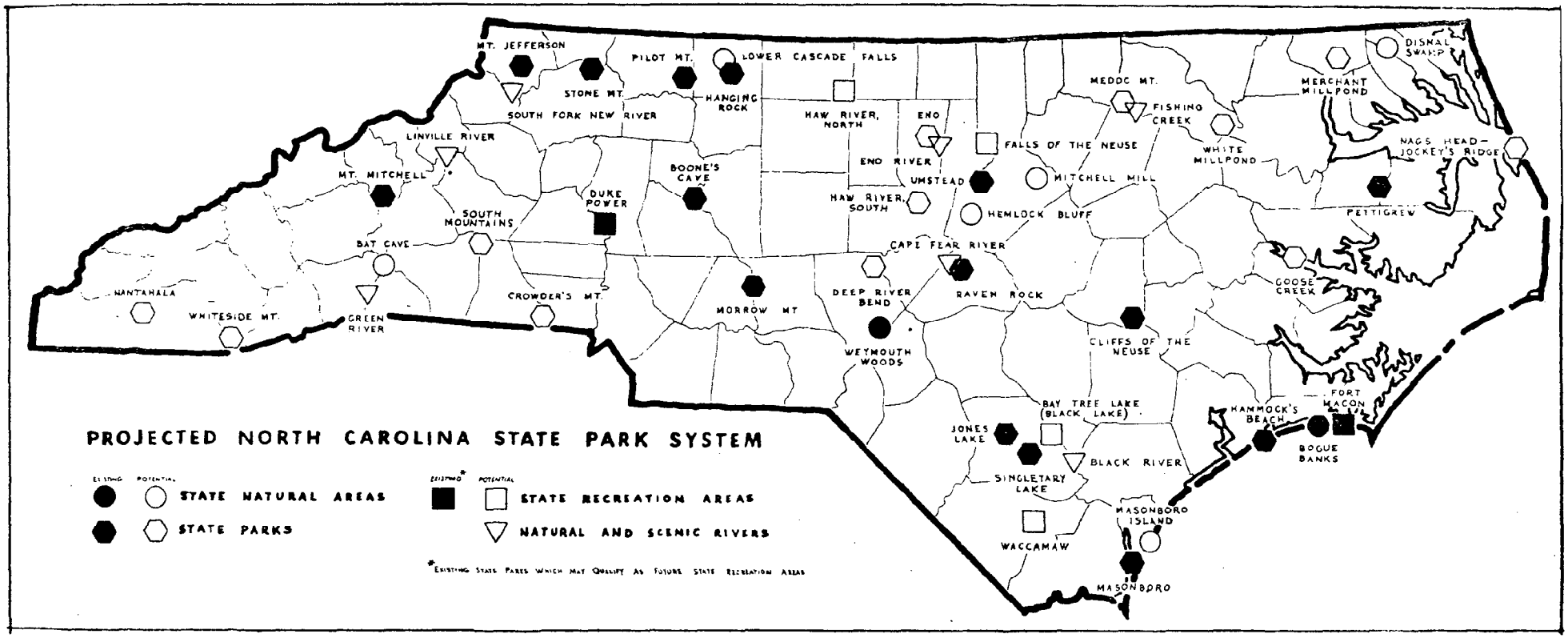
Most notable of these were the efforts, in North Carolina, of the county offices of the Soil Conservation Service to conduct appraisals of potentials for outdoor recreation developments. When complete, the results of this program will be of value to the SCORP program.

In addition, potential resources for North Carolina State Parks were pointed out by the Division of State Parks. The essence of this accounting appears in Figure V. 4. This figure should in no way be construed as being representative of the total future State Park System.

Furthermore, the Lakes Study of the SCORP included a listing of all known proposed or potential impoundments in the State--another resource considered as having potential for water-oriented recreation.

FIGURE V. 4

(52-2.00)



Chapter V — Outdoor Recreation Supply — 53-0.00 thru 53-1.10

Special Supply Studies — 53-0.00

North Carolina Coastal Zone — 53-1.00

General Introduction — 53-1.10

The coastal zone of North Carolina has not experienced the great pressures for use and development that have occurred in the Northeast or Florida. Such pressures have come from the high concentrations of population near the ocean shoreline, and in North Carolina there is only one city with a population in excess of 25,000 that is within 50 miles of the beach area (Wilmington).

Because of this population characteristic the ocean shoreline in North Carolina has developed as a "family-oriented" recreation use area. The major activities revolve around a family making an overnight--or longer--visit to the beach. Thus the major portion of facility investment on the coast is centered on providing living quarters--beach cottages, motels, apartments, trailer and tent campgrounds.

Coastal shoreline development has occurred with a general lack of planning, regulation and control. There is no comprehensive land use planning and regulation being carried out, and it is only in the past few years that dune protection, dredge and fill regulation, building codes, and similar controls have been established for the North Carolina Coastal Zone. Although the lack of large population centers nearby has retarded development pressures the absence of land use planning, regulation and control has often resulted in the type of development that generates problems. The accelerated activities of large-scale land development is intensifying such problems. In addition--there are population centers in Virginia within 50 miles of the North Carolina coast that add greatly to potential demand. There are, for example, about 500,000 people within 50 miles and 1.5 million people within 130 miles of Currituck County beaches.

Chapter V — 53-1.20 thru 53-1.21

Outdoor Recreation Supply

Recreation Potential of the Coastal Zone — 53-1.20

The coastal zone, as defined for the study, includes all counties with an ocean shoreline or shoreline on the sounds. Together, these counties have 1,300 miles of sound and ocean shoreline and more than 1,600,000 acres of water in the several sounds. This valuable estuarine area has an excellent recreation climate. While the water areas are in State ownership there are only 139 miles of the ocean shoreline in public ownership. The coastal zone is divided into several distinct sections to facilitate the description of its recreation potential.

Barrier Islands — 53-1.21

Ocean Beaches--The beaches from Oregon Inlet to Cape Hatteras and on to Cape Lookout are remote from the mainland. A ferry provides access between Hatteras and Ocracoke Islands, but no means of automobile access exists to Portsmouth Island, Core Banks, and Shackleford Banks, and facilities are minimal. Cape Hatteras National Seashore had 1,300,000 visitors in 1969 which is not intensive use in terms of the total beach mileage--70 miles.

Near Wilmington, Beaufort, and Nags Head, the development is much more intensive. Undeveloped ocean front property is scarce. There is, however, space available for development on other than ocean front locations.

The beaches west of Wilmington (Oak Island, Ocean Isle, and Sunset Beach) have experienced much slower development and beach front property is readily available. Currituck Beach, to the north has even less development, although development pressures have increased greatly in recent years.

In broad terms, there can be greatly expanded recreational use of the ocean beaches without damage or destruction. It is expected that the major demand will be for the family outing which does not require intensive development or heavy use. The ocean beaches, for this type use, can handle several times as many people.

Additional research will be required in order to determine the optimum use of ocean shoreline areas as family beaches. Full consideration must be given to the constraints of the limited area for assoicated services.

Shoreline of the Sound--There has been very little development of the sound side of the barrier islands. From Beaufort to the Virginia line there are no cities or towns, no major marinas or ports, one housing development and only a few docks or piers. With inexpensive modification, areas for cottages, recreation use areas and support facilities could be developed.

The Mainland Area 53-1.22

The mainland area, and especially the shoreline of the sounds, has experienced very light pressure for recreation development. The only significant development is in the Morehead City-Beaufort area with a deep water port, marinas and cottages along the shore. Elsewhere along the mainland shore, there are scattered small docks and boat launching ramps, campgrounds, and small harbors.

There are only small numbers of vacation cottages or second homes constructed in the area. Natural beaches are not common and those that exist are very narrow. There is high potential for constructed beaches, cottages and marinas. These type developments would open adjacent areas for such recreation activities as hiking, nature trails, bird watching, hunting and similar uses. Fishing and boating in the sounds and rivers can absorb large increases before experiencing overcrowding or damage.

Also within the mainland area are a large number of natural lakes that provide potential for expanded recreation use. They include Mattamuskeet, Phelps, Pungo, Jones, Alligator, Long, Singletary, Little, Great and Waccamaw. There is development at Lake Waccamaw and, to a lesser degree, at Lake Mattamuskeet. Pettigrew State Park borders on Phelps Lake, and State-owned campgrounds are operated adjacent to Singletary Lake.

Current and Emerging Problems 53-1.30

Problems currently existing and recognized and those that are emerging are listed as follows:

1. The pattern of private ownership is reducing the accessibility of the shoreline to the general public. Lack of public access will limit the use of estuarine and shore areas by the general public. With increased recreation demand in the future, this problem will become critical.

2. Lack of guidance and control has allowed dune, beach and marsh damage. This in turn, has caused increased wind and water damage to the basic resource as well as more frequent flooding.

3. Insufficient treatment of municipal and industrial wastes, agricultural chemicals, unstablized spoil disposal areas, sedimentation and general debris are all factors which contribute to the pollution of the sounds and inlets. Pollution is critical now for only a relatively small part of the total coastal area. Without control it could become critical enough to make the area undesirable as a recreation resource. The actual loss of fish production due to the present destruction of marsh areas has not been accurately determined. There is no question that loss of the remaining marsh will seriously affect fish production and reduce this valuable commercial and recreation resource.

4. The lack of adequate capacity standards or guidelines for the management of recreation areas is resulting in overuse of some areas.

5. Further research is needed into shore erosion and practical methods of management and control. There is a lack of detailed information on the nature, quantity and quality of the coastal natural resources and how various factors act and react with one another. Better understanding is needed to allow development to take place with prior knowledge of impact and effects.

6. A clear identification of State-owned or controlled land along the beach, sound shoreline and streams is needed.

7. Controls and guidance for development of the coastal area are needed, including: a) land use regulations--to guide and regulate the uses to which land can be allocated; b) subdivision regulations--to guide and regulate the layout of proposed developments; and c) building codes (housing, plumbing, electric, water supply, sewage treatment, etc.) to guide and regulate the quality of construction.

8. There is some question as to whether or not the general public has sufficient understanding to support the changes that will be required to conserve, develop and manage the basic resources involved.

Natural, Scenic and Recreational Rivers — 53-2.00

Introduction — 53-2.10

The population growth in North Carolina, along with the trend for dispersal of both people and industry, is having a profound effect on our rural areas. The acreage of undeveloped land and rivers is getting smaller every year, yet more and more people are seeking natural and scenic settings in which to spend their leisure time.

Many of North Carolina's rivers are a source of great scenic and natural beauty. They are a reminder of the peace and tranquility that is fast vanishing from everyday life in man's quest for affluence.

State and Federal recreation areas are being acquired and developed; however, the need for preservation of our natural and scenic streams has been largely overlooked. The remaining free-flowing streams are, for the most part, subject to development.

Natural Rivers Study 53-2.20

An inter-agency committee was appointed and charged with the responsibility to study natural, scenic and recreational rivers and develop recommendations for a State program. The major tasks were to prepare criteria for evaluating the streams of the State, prepare legislation to institute a Natural and Scenic Rivers System and recommend streams to be included in the system.

The evaluation criteria which was developed as a part of the committee's actions are as follows:

a) River segment length--must be no less than one (1) mile.

b) Boundaries--of the system shall be the visual horizon or such distance from each shoreline as may be determined to be necessary by the Director, but shall not be less than twenty (20) feet.

c) Water quality--shall not be less than that required for Class "C" waters as established by the North Carolina Board of Water and Air Resources.

d) Water flow--shall be sufficient to assure a continuous flow and shall not be subjected to withdrawal or regulation to the extent of substantially altering the natural ecology of the stream.

e) Public access--shall be limited, but may be permitted to the extent deemed proper by the Director, and in keeping with the purpose of this article.

Legislation was written for introduction to the General Assembly. The proposed act stated the purpose to be achieved, State policy on free-flowing rivers, the major items of the evaluation criteria and the administrative means to implement the program.

During the study period the committee had a list of rivers prepared for consideration as wild, scenic or recreational rivers. The total number of streams studied was 44; 8 as wild rivers, 26 as scenic rivers and 10 as recreational rivers. From this group, there were six selected as the recommendations of the committee to be the first streams in the system.

Conclusions 53-2.30

It is generally agreed that the criteria developed for stream evaluation were reasonable, allowed for determining the relative value of a stream for inclusion in the system, and provided a means for the General Assembly to decide which streams should be designated as wild, scenic or recreational rivers. The streams nominated all meet the criteria and would make a contribution toward preserving streams for the pleasure and enjoyment of the public.

While the Act to institute a Natural and Scenic Rivers System was passed, there were no streams placed into the system. It is concluded that the presentation was not sufficient, or did not have enough broad support, to convince the General Assembly of the value of placing the six streams into the system of free-flowing rivers.

Resources for Trails in North Carolina 53-3.00

Introduction 53-3.10

The traditional attitude of parks in terms of large two-dimensional blocks of land is gradually changing. In recent years the value of linear parks is taking a prominent place in recreation planning. In broad terms the change is a response to the increased growth in such activities as hiking, biking, and horseback riding. In the 1965 survey of Outdoor Recreation Activities, walking for pleasure was the most popular summertime recreation activity, biking

was fifth, nature walks eleventh, horseback riding thirteenth, and hiking fifteenth. Thus, trails are an important element of the total outdoor recreation resource picture. The rapid increase in interest during the last ten years is expected to continue into the future.

Existing Trails — 53-3.20

In a 1966 nationwide study there were listed 102,589 miles of trails in the United States. Of this total, 1,431 miles were in North Carolina. The best known trail in North Carolina is the Appalachian Trail, which begins in Maine and follows a generally southern direction for 2,000 miles to its terminus in Georgia. Of the total distance, 343 miles are in North Carolina and Tennessee or follow the State line.

In the mountain portion of the State there are many trails in addition to the Appalachian. In and near the Great Smoky Mountains National Park, there are 2,000 miles of trails (partly in Tennessee). There are 36 miles of trails in the Nantahala National Forest, 82 miles in the Blue Ridge-Mount Pisgah area and 90 miles in the Mount Mitchell-Grandfather Mountain area. Other trails are found in the Linville Gorge Wilderness area and in the Joyce Kilmer-Slick Rock area.

Recent trail development activities in the Piedmont or central portion of the State are interesting. Near Charlotte there is being developed "the President's Trail" to connect the birthplace of President James K. Polk in North Carolina and Andrew Jackson State Park in South Carolina. In Burlington a seven-mile bikeway has been established--to be known as "Burlington Bikeways".

As indicated above, the major portion of trails in the State are on Federal lands and located in the mountain section. Federal trails amount to 1,377 miles and State administered trail mileage is 54 miles. None of these trails are designated for use by bicycle or trail scooter. They are limited to use as foot trails with part--362 miles--designated also for horseback riding.

Chapter V — 53-3.30 thru 53-3.34
Outdoor Recreation Supply

Potential for Trails in North Carolina — 53-3.30

The detail investigation necessary to locate specific trail potentials was not a part of the study. A general description of the various types of resources was considered and the results are summarized below:

Abandoned Railroads — 53-3.31

The right-of-way of an abandoned railroad can usually be developed quickly, and in an inexpensive manner, as a trail. Data describing the length of all abandoned railroads in the State is not available. However, the records of the Interstate Commerce Commission do show 201 miles since 1960.

Utility Rights-of-Way — 53-3.32

There are many examples of trail development using utility rights-of-way in several states. Reasonable selection would allow for an interesting trail system. Within the State there are several thousand miles of such lines that need to be studied to estimate their practical potentials for trail use.

Abandoned Roadways — 53-3.33

The ease of developing trails on abandoned roadways would be similar to that for abandoned railroads. Inventory data is not available but mention is made in the report so that future studies can consider this potential.

Logging Roads and Slides — 53-3.34

Reference is also made to logging roads and slides as a resource with potentials for trail development.

Chapter V — Outdoor Recreation Supply — 53-3.35 thru 53-3.39

Rivers and Streams — 53-3.35

There are 15,312 miles of rivers and streams in the State having significance as fishery habitat, and in particular there are 1,170 miles tentatively identified as having potential for inclusion in a Natural Rivers System. Many of these stream miles have potentials for trail development and use.

Existing Roads and Highways — 53-3.36

The State controlled road system contains a total of 74,000 miles. The development of trails in conjunction with this roads system has great potential.

Developed Waterways — 53-3.37

Under this category would be included channel projects, canals and the Atlantic Intracoastal Waterway. Often the clearing needed for construction and spoil disposal areas nearby would allow trail development without expensive investments.

Historical Cultural Resources — 53-3.38

The Presidents' Trail mentioned earlier is an excellent example of this type trail potential. Others that should be considered are: (1) trails in conjunction with the preservation of covered bridges, (2) a Daniel Boone Trail, (3) a Trail of Tears along the route taken by the Cherokee Indians as they were evacuated and (4) trails along routes taken by various armies during the Revolutionary and Civil Wars.

National and State Parks and Forest — 53-3.39

There are opportunities to not only expand existing trail systems in these areas, but also to establish trails between such areas as linkage to other parks, forests, historic, scenic or outstanding natural areas.

Chapter V — Outdoor Recreation Supply — 53-3.50 thru 53-3.60

Standards and Criteria for Trails — 53-3.50

There are many kinds of trails (hiking, bicycling, horseback riding, motorized vehicles, waterways) and different kinds of trail users (athletes, handicapped, experts and novices, young and old, strollers and students of nature). There is also great variety in North Carolina resources that can be used for trails. Trails should be developed and programmed to encourage visitors to utilize all their available senses to the fullest. Under these conditions it must be recognized that uniform standards and criteria that would apply to all types of desired experiences for all types of resources are not feasible.

Standards and criteria have received increased study since the passage of the National Trails System Act of 1968. This act sets up broad standards and criteria as they would apply to trails of national significance. The Bureau of Outdoor Recreation has added more details and published reports to describe them, such as Trails for America and National Scenic and Recreation Trails. Several organizations have also made studies to develop and refine standards and criteria.

Standards and guidelines for trail development, operation and maintenance are needed; however, professional judgment can now provide sufficient understanding to allow a trail program to move ahead in order to satisfy the increased interests in trails and trail use.

Agency Plans and Programs — 53-3.60

As indicated earlier, there are 1,431 miles of trails in North Carolina and the major portion of the mileage is on Federal land (1,377 miles) and in the mountain section of the State. Up-to-date information is not available but in 1966 there were plans by Federal agencies to add 437 miles of new trails. This included 386 miles

by the U. S. Forest Service, 46 miles by the National Park Service and five miles involving National Wildlife Refuges. State agencies, at the same time, proposed to add 15 miles of new trails. All the trails proposed would be foot trails with the exception of five miles available for bicycle.

Flood Plains--A Potential for Recreation and Open Space 53-4.00

Introduction 53-4.10

Flooding is of concern when damages occur to people or property. Today there is a frequent occurrence. The early settlers depended upon streams for transportation, water supply and for disposal of wastes. They also used the streams for such recreational pursuits as boating and fishing. As a result, the early towns and cities quite frequently were located on the banks of the rivers and streams. In addition, the early settlers soon learned that flood plain soils were very productive for many farm crops.

Even up to the present day construction continues to take place in flood plains. This indicates that memories of past events are poor or that developers have an optimistic attitude suggesting the future will not provide similar--or larger--floods. The total effect is that flood plains have considerable development and are used for farming, recreation, industry, business and homes. Such development often results in damages and monetary losses.

Dimensions of North Carolina Flood Plains 53-4.20

There are approximately 40,000 miles of streams in North Carolina. This includes all streams that have been placed under the Stream Classification System in addition to many small drainage streams and ditches. The 15,000 miles of streams that are described as having significance as fishing waters are of more importance for recreation.

In an effort to better define and describe the flood plains, a study was made of the areas subjected to flooding. The areas were classified into: (1) those with frequent flooding involving inundation once in 1 to 5 years, and (2) those with infrequent flooding involving inundation once in 5 to 20 years. These data are summarized below.

TABLE V-8

(53-4.20)

AREA SUBJECTED TO FLOODING (ACRES)

	Mountains	Piedmont	Coastal Plains	Total
Frequent Flooding	145,940	711,424	785,246	1,642,610
Infrequent Flooding	41,289	152,724	899,776	1,093,789
Total	187,229	864,148	1,685,022	2,736,399

The total area of flood plain represents less than 9% of the area of the State and is much greater in the coastal plains than other sections of the State. The mountain area, with its steep, rugged valleys, has relatively narrow flood plains.

Flood Plain Development and Use 53-4.30

The frequency of flooding on North Carolina streams varies greatly from one section of the State to another. There have been great floods in all sections, some of which caused damage in excess of $25,000,000. The average figure is in the range of 1.5 to 2.0 million dollars per year. These events, along with the concurrent economic loss and injury to people, are the basis of interest in civil works projects to provide protection. Yet as these projects are carried out, development of flood plains continues so that large floods today cause greater and greater damage.

To further analyze the use of flood prone land, data were developed to describe present conditions. These data are summarized below.

TABLE V-9
(53-4.30)

PRESENT USE OF FLOOD PLAIN LAND (ACRES)

	Cropland	Pasture	Woodland	Other	Total
Frequent Flooding	226,951	137,895	1,230,639	47,125	1,642,610
Infrequent Flooding	283,827	72,670	702,111	35,181	1,093,789
Total	510,778	210,565	1,932,750	82,306	2,736,399

The most common use is woodland with cropland next in order. In total, the developed use (cropland, pasture and other) is a small portion of the total.

The pressure to expand and develop is a common occurrence in the State. Such pressures are expected to continue--if not intensify--in the future, in order to meet the increasing needs of the population. It is reasonable to plan for these expanded needs. Questions need to be answered concerning the practical aspects of further development of flood plain lands, and greater control of their use.

Recreation Interests in Flood Plain Lands — 53-4.40

Recreation interests should agree that the protection of present development from flood damage is a reasonable objective, especially in those situations where injury and loss of life might be involved. There is, however, a serious need to develop and initiate practical alternatives to the intensive use of flood prone lands.

An excellent example of practical flood plain planning is the proposal for the Yadkin River contained in the Yadkin River Study. This study was done by the students in the Department of Landscape Architecture of North Carolina State University. The report was published in May of 1971. This study contains an analysis of topography, soils, vegetation, geology, hydrology, land use and other factors. The study area was divided into ridge land, valley wall land, and flood plain land. The following is a summary of the conclusions reached in that study:

Ridge Land 53-4.41

This portion of the valley is well suited for urban development and intensive recreation use such as gymnasium and/or stadium activities.

Valley Wall Land 53-4.42

The valley wall land is less suitable for urban and intensive recreation use, but it is recommended for such use as golf courses, horseback riding, picnicking and similar recreation activity areas.

Flood Plain Land 53-4.43

The flood plain land is the least desirable for urban or intensive recreation use. It is recommended for low intensity recreation use such as hiking, camping, and other dispersed activities.

A master plan for the Yadkin River area was prepared which indicates activity areas in connection with scenic bluffs, access roads, a trail system and other features. All planning is based on the present flooding conditions and no flood control measures are proposed.

There are other studies and programs of a similar nature that demonstrate the value of flood plain plans developed to be compatible with present flooding conditions. The need for plans of this type can be illustrated by the fact that there are only a few such examples compared to the large number of civil work proposals.

The Practical Alternatives — 53-4.50

A change in the emphasis of programs to assist in flood plain use and development is needed. Under present programs, there are two broad alternatives.

The first involves floodwater storage structures, increased channel capacity, the use of levees or dikes, and similar major project activities with objectives aimed at managed or modified stream flow. The problems being solved are those caused by man's development activities. The Federal government assumes major responsibility, and most of the planning and construction funds are from the Federal budget.

The second alternative is concerned with achieving flood protection by land use regulation (limiting development that is damaged by flooding), use of flood proofing and similar methods. This approach has as its aim, preventing problems from developing. The major responsibility is assigned to local government and the funds required must be provided from local tax sources.

Under these conditions, the resource managers and decision-makers must decide between installing an unpopular zoning project carried out with local funds, or a glamorous public works project supported primarily with Federal funds.

Summary — 53-4.60

Planning and development that remains within the constraints imposed by periodic flooding conditions is the rarely used approach. There are serious needs in urban areas for recreation areas, open

space and greenways that can be achieved in flood plains without additional flood management measures. There must be strong proposals for this type of project that are practical, technically sound and related to needs. Such proposals will require increased efforts from personnel having responsibilities for providing recreation opportunities.

Lakes and Reservoirs for Recreation in North Carolina 53-5.00

Introduction 53-5.10

A significant proportion of total outdoor recreation activity in North Carolina is now, and will continue to be, dependent on or enhanced by water. The total supply exceeds 2.5 million acres of water surface in rivers, streams, ponds, sounds, marshes and lakes--natural and man-made.

Supply Analysis 53-5.20

In terms of natural and man-made lakes alone, the supply in North Carolina is rather imposing. An inventory was made of all lakes and reservoirs with surface areas of 100 acres or more, and it was found that the surface acreage within the borders of the State is 269,821 acres. This amounts to 53.09 surface acres per thousand population. In addition to excluding lakes smaller than 100 surface acres, this figure excludes the acreage of sounds and wetlands along the coast. The variation across the State is large and is summarized in Table V-10.

TABLE V-10

(53-5.20)

REGIONAL RANKING BY ACRES OF LAKES
(100 ACRES OR MORE) PER THOUSAND POPULATION

Rank	Region	Acres/1000
1	R	735.88
2	A	259.03
3	K	195.04
4	E	87.18
5	H	85.19
6	0	58.74
7	F	57.46
8	L	44.47
9	N	41.18
10	C	29.46
11	G	16.75
12	P	14.07
13	D	10.58
14	J	5.94
15	M	5.78
16	B	5.55
17	Q	1.13
State		53.09

Seven of the multi-county regions have ratios of surface acreage of reservoirs per thousand population which are greater than the State average and ten regions fall below the State average.

Another analysis compared the relative distribution of lakes and reservoirs in terms of the 17 large urban areas in the State (with population exceeding 25,000). There is an average of 129.34 acres per thousand population for reservoirs of 1000 acres or greater, that are within 50 miles of large urban areas. Six urban areas exceed this figure, and eleven fall below it. The ranking of those eleven falling below the State average is shown in Table V-11.

TABLE V-11

(53-5.20)

RANKING OF ELEVEN URBAN AREAS THAT FALL BELOW THE STATE AVERAGE IN TERMS OF ACRES IN 1000+ ACRE LAKES WITHIN 50 MILES

Urban Area	Rank	Persent Acres/1000 Population
Goldsboro	1	8.96
Wilson	2	9.48
Burlington	3	12.65
Fayetteville	4	23.98
High Point	5	49.59
Durham	6	56.44
Raleigh	7	56.64
Greensboro	8	58.69
Chapel Hill	9	62.92
Asheville	10	85.86
Winston-Salem	11	122.32

Conclusions 53-5.30

Major reservoirs under construction, approved, proposed and under study would alleviate needs for all of the above listed urban areas. However, this type need alone is not sufficient justification for project action. Factors that must be considered in individual project analysis and justification are:

1. The relationship of alternate resources including small reservoirs, free-flowing streams, ocean, and sounds to the need for larger reservoir surface acreage.

2. The feasibility (in terms of physical characteristics, economic constraints, and competing resource uses) of existing rivers and streams being impounded for recreation and other purposes.

3. The inter-relationships of existing reservoirs and other proposed, planned, and studied reservoir in terms of recreation needs and related project purposes.

4. The availability and suitability of existing and other proposed reservoirs for recreation use.

All future reservoir plans and proposals should incorporate an analysis of the suitability, availability and current use of existing reservoirs for recreation within a 50-mile radius of the proposed project into the analysis of recreation demand. Furthermore, all water resource development proposals involving free-flowing rivers and streams should include an analysis of feasible alternative uses of these water resources and the needs for such, including an assessment of the need for free-flowing rivers. The 1971 General Assembly enacted legislation which defines State policy in regard to natural and scenic rivers. Reference to this Act, and other pertinent legislation, should be made in all water resource development proposals involving major rivers in the State.

The present value of water and shoreline recreation is recognized. The future value which reservoirs provide in this regard will be largely determined by State and local action. Enabling legislation has been passed which: (1) permits cooperative acquisition and development of recreation land where individual units of local government alone are unable to provide such facilities, (2) implements State and local cooperation in Federal water resource projects and grants local governments financial and land acquisition powers in accomplishing such projects, (3) provides financial assistance (through LWCF and PL 566 projects) for the development of recreation areas around reservoirs. The State is called upon to give assurance of non-Federal public cooperation in recreational development of Federal reservoirs. These assurances are based on the Federal Water Projects Recreation Act (PL-89-72). Means need to be developed for the State to more accurately assess recreation potentials and needs of such projects and to assist local units of government in fulfilling their obligations. This requires planning in detail (1) the contributions to be made by non-Federal public interests on the various projects and (2) the resources--financial and other--that will be needed to provide them. The State needs to improve its system of giving assurances as called for in the above named Act.

Continued coordinated planning is needed at all levels of government, and involving the private sector. In order to adequately fulfill its obligations concerning reservoir development the State needs to improve its recreational planning to where it is able to stay abreast of Federal agency project planning. A continuing assessment of reservoir-recreation supply and need--including a further refinement of data and analysis techniques--on a statewide basis is needed. Statewide recreation planning should include a continuing assessment of needed changes in recreation related policies and procedures of the various agencies involved in the development and use of reservoirs within the State.

A master plan for recreation should be required of all reservoirs of 1,000 acres or more in surface acreage constructed in the State, and guidlines for such plans need to be developed as a part of the continuing planning program of the State.

Technical assistance is available to local units of government in the planning, development and management of reservoirs for recreation. The inability of local units of government to adequately fund such projects requires that financial assistance be provided in addition to present programs such as LWCF and PL 566. A State grant-in-aid program should be initiated to assist local units of government in this regard.

Local units of government should assume responsibility for developing land use maps, population studies and economic base studies as a means of guiding recreation development of reservoirs. Also, local units of government should assume responsibility for assessing the recreation potential of existing and proposed reservoirs and translate this potential, as well as the recreation requirements of the people within their jurisdiction, into a recreation land use plan for the area surrounding the reservoir. Suitable provision for financing should be included as a part of this plan when submitted to the appropriate governing body.

Zoning concepts, procedures and regulations should be broadened in order that valuable public waterfront recreation land and access areas might be protected through establishment of public reserve zones around existing and proposed reservoirs.

In order that reservoirs may provide their optimum in recreation enjoyment it is important that the public be fully informed as to (1) their availability, (2) their physical characteristics, (3) the various management policies and rules, and (4) pertinent safety rules and conditions all of which influence the recreational use of these resources.

The State should initiate a program of reservoir mapping and data collection designed to provide full information as to the physical characteristics of each reservoir of 1,000 acres or more in area. Such data would be applied to programs of public education and to continuing planning.

There are, at present, no universally accepted methods for analyzing either the demand for or the capacity of reservoir for recreation. Until such methods are developed, planners, developers, and managers of reservoirs will have to rely on insufficient data for decisions regarding the recreation use of reservoirs. The likely results of this will be a failure of these resources to equitably and effectively fulfill recreation needs to their optimum capacity. An accelerated program of research should be developed in these two subject categories (demand and capacity), and including such factors as activity mixes, various types of zoning (both on and around reservoirs) and the relationship of various lake characteristics to these factors. In addition, management policies and procedures should be further analyzed in terms of recreation use of reservoirs, and recommendations developed in such a way that individual reservoir operators may readily adapt these to their specific needs.

There is much to be done in terms of developing procedures and guidelines for assessing the impact of reservoir construction, operation and use on the environment. Qualitative, as well as quantitative planning is required in all facets of the environment. All levels of government and the private sector should accelerate their efforts to develop and implement means of assessing environmental quality and the effects of present and proposed projects on the environment.

The use and abuse of areas and facilities by the public is a major factor affecting the protection of the enviornment. A program of public education should be developed and put into use geared to informing the general public of the proper and most enjoyable use of all recreation resources, including reservoirs and lakes.

A multitide of legislative actions, agency rules and regulations, operating policies and procedures are presently in effect which concern the recreation use of reservoirs. These have resulted from efforts of individual agencies to fulfill various

recreation responsibilities in the context of their individual missions. The regulation of various forms of recreation and of other uses of State Lakes is now divided between the Division of State Parks and the Wildlife Resources Commission.

The areas operated by the Kerr Reservoir Development Commission are not part of the State Parks system. There is no public access provided by the State on three of the State Lakes. The State has no overall policy or operating procedures in regard to reservoir development and use for recreation. The tremendous impact of reservoir-oriented recreation creates a need for a uniform statewide policy. The State should develop and implement a policy in regard to its responsibilities for providing public access as well as other types of recreation facilities along existing and proposed reservoir shorelines. Such a policy should also include a definition of the State's responsibility in rendering adequate technical and financial assistance to other units of government which desire to provide recreation facilities and services on existing and proposed reservoirs.

Resources for Scenic Highways in North Carolina 53-6.00

Introduction 53-6.10

There is great interest in driving for pleasure as a recreation activity, and it is estimated that this interest will increase in the future. Therefore, one might expect scenic highways to receive attention similar to that being given to other recreation resources. However, the development of roads that are limited to recreation use is not great.

Magnitude of Scenic Highways 53-6.20

Most of the scenic highways are the National Parkways or are on lands owned by the Federal government. The major components of the scenic road system as reported in A Proposed Program for Scenic Roads and Parkways, are summarized below:

Chapter V — 53-6.21 thru 53-6.30

Outdoor Recreation Supply

The National Park Service — 53-6.21

The total nationwide scenic highway mileage authorized for the National Park Service was 1,102 miles with 785 miles completed. All of these parkways do not meet the criteria of a scenic road limited to the pleasure and enjoyment of the driving experience, at low design speed, and no commercial traffic allowed.

The U. S. Forest Service — 53-6.22

The total nationwide scenic highway mileage under the jurisdication of the U. S. Forest Service is 341 miles. The Forest Service also constructs and maintains many miles of multi-purpose roads within the National Forests that serve as scenic roads for travelers.

Other Federal Departments — 53-6.23

There are other federal agencies that build roads that have scenic or recreational values; however, they are built for some other primary purpose. The Corps of Engineers, the Tennessee Valley Authority and the U. S. Fish and Wildlife Service are examples.

Mention should also be made of the Federal Aid Highway System that includes 41,000 miles of Interstate Highways, 265,000 miles of primary roads and 600,000 miles of secondary roads. This system was constructed with primary objectives other than developing scenic roads.

In North Carolina there are no State developed roads that are primarily built for their scenic and recreation values.

Interest and Demand for Scenic Roads — 53-6.30

There are rather imposing figures to show the Americans' interest, and demand, in driving as a pleasurable activity. It is estimated that 80% of the population owns one or more cars and that of all of the travel by car, one-third is for pleasure. Driving

for pleasure was the third most popular outdoor recreation activity in the country in 1965 and was the most popular activity in North Carolina in 1971.

There are sound reasons to expect that the interest and demand will increase rapidly in the future. There will be increased numbers of people and cars, income will be greater and the work week will be reduced.

Planning Activities for Scenic Roads 53-6.40

The Recreation Advisory Council, created by President Johnson in 1962, carried out a major planning effort regarding scenic roads. This study took a comprehensive view of recreation interests and needs, and considered the important facets of the use of roads for recreation and pleasure. The major subjects studied in depth included the following:

Leisure Time 53-6.41

After careful study it was concluded that the interest and demand will continue to increase in line with increased leisure time and income available to the public.

Benefits 53-6.42

The study concluded that benefits from an expanded scenic road system would be economic and social dividends that are related to national defense, safety, health and conservation of scenic resources.

Scenic Corridors 53-6.43

The study makes a strong point of the needs for providing roads that are truly scenic and that will provide an interesting experience.

Protection of Resources — 53-6.44

It was concluded that protection of the highway corridor is of great importance. Changes that alter the characteristics of the countryside and damage, or destroy, its value for scenery or recreation should be prevented.

Complementary Facilities — 53-6.45

Facilities proposed were to be complementary to the primary purpose which is a scenic road. They would add much to the enjoyment of the pleasure or recreation driver.

Planning and Design Principles — 53-6.46

Attention was given to changed planning and design principles so objectives other than movement of traffic loads could be achieved. Such items as: location, size, layout, character, development, operation and coordination were discussed. There was an attempt to devise new road building standards to improve recreation aspects of a road system.

Conclusions — 53-6.50

The planning effort by the President's Council on Recreation and Natural Beauty was an attempt to initiate action to provide roads for pleasure driving. The study, carried out under the leadership of the Department of Commerce, was comprehensive in scope and had a considerable expenditure of planning resources and funds. The subject areas in which the study made its greatest contributions are: planning and design principles, criteria and standards; control of advertising signs and junkyards; and landscaping.

There is very little to show in actual scenic roads or parkways that resulted from the rather large study effort.

Chapter V — 53-7.00 thru 53-7.20
Outdoor Recreation Supply

Historic/Cultural Sites — 53-7.00

Introduction — 53-7.10

The cultural and historic resources in North Carolina are great in number and significance. The State was deeply involved in the early settlement of the nation, in early education systems and in early wars and military actions. The State provided leaders of influence in political matters, and was an early leader in architectural style. There were also early Indian tribes that are now of great historic/cultural interest.

This situation has produced a long and varied list of historic/cultural sites. A detailed description of historic preservation activities and an inventory of sites is contained in An Interim, North Carolina State Plan for Historic Preservation prepared by the N. C. Department of Archives and History.

Inventory of Historic Sites — 53-7.20

Recognizing the need for a comprehensive statewide survey of historic sites, the State Department of Archives and History inaugurated a site survey program in 1967. The purpose was to identify sites of local, state and national significance to serve as a basis for more orderly development of preservation activities.

Prior to this survey program there was very little concentrated and coordinated planning for historic preservation. Interest has now increased and is resulting in solid accomplishments. The historic site inventory was carried out using increasing numbers of professional staff members and part-time summer employees. Field surveys were carried out, contacts with interested local groups were made and past State records were studied--all to gather data to assure a coordinated listing of sites. The results provided a systematic listing of over 2,500 sites fully indexed in an inventory using 25 major headings or themes. This inventory serves as the basic data for the expansion of the historic preservation program for the State.

The first nominations by the State to the National Register of Historic Places were made in December 1969. With expanded staff and interest this activity is providing solid accomplishments. There is considerable work required to locate, identify and prepare sufficient historical documentation under the high professional standards being followed in the program. By August 1970, there were 30 sites officially entered in the National Register. To illustrate how well the program is progressing, the number of sites entered in the National Register as of June 1972 had increased to 188 with 13 additional sites being processed.

State Historic Sites — 53-7.30

The State Department of Archives and History operates the following historic sites:

Historic Bath, Bath
Alamance Battleground, Burlington
Bennett Place, Durham
Bentonville Battleground, Newton Grove
Brunswick Town--Fort Anderson, Southport
Charles B. Aycock Birthplace, Fremont
Fort Fisher, Kure Beach
Governor Caswell Memorial--C.S.N. "Neuse", Kinston
Historic Halifax, Halifax
James K. Polk Birthplace, Pineville
Somerset Place, Creswell
Town Creek Indian Mound, Mt. Gilead
Zebulon B. Vance Birthplace, Weaverville

Note: None of the sites have an admission fee except Historic Bath.

There are many other historic sites that are preserved in the State. There are 13 National Historic Landmarks, 10 Federally-owned Historic properties and 20 State-owned Historic properties. A total of 40 restorations are in process in the State under a variety of arrangements that involve Grants-in-Aid administered by the Department of Archives and History.

Historic Preservation Problems

53-7.40

When evaluated using numbers only, it could be said that the historic preservation program has made only minor accomplishments. There are 2,500 sites in the inventory and public agencies have effected a very small part of the total--for example, 188 sites listed in the National Register. This would not represent a fair evaluation, however, because it does not consider the public funding level over the years. Further, orderly procedures are being developed, and carried out, as well as high standards of quality for the preservation program. This is not to suggest that all major problems have been solved. Many remain that must be resolved. As listed in the Interim plan they include:

1. The lack of appreciation and acceptance of the values of North Carolina heritage.

2. A determination of what is historic.

3. Where and what are the State's historic places.

4. The creation of a system of effective control and leadership.

5. The lack of trained personnel to plan and implement historic restoration and preservation.

Conclusions

53-7.50

Historic/Cultural sites are recognized as an important facet of the total outdoor recreation program of the State. Whatever the present major thrust, consideration must be given to more than economic benefit accruing from attracting visitors to a historic/cultural site. The values of constructive use of leisure time and the educational values obtained by study of our past must be balanced against the tourism benefit. In addition, many of the benefits of the preservation program extend beyond outdoor recreation considerations.

Chapter V — 53-7.50 thru 53-8.20
Outdoor Recreation Supply

It is in the best interests of the State to encourage and support the preservation and restoration programs of the Department of Archives and History. Further, the Department should be provided with necessary authority and funds to assure more rapid progress in the preservation of historic/cultural sites.

Recreation on North Carolina Islands 53-8.00

Introduction 53-8.10

The island resources of North Carolina are fragile elements of the environment. Yet, they are subject not only to the forces of nature but also to the forces of man's many competing uses. Recreation is one of these competing uses.

An island is any land mass that is surrounded by water. The water may be in the form of an ocean, river, lake, sound or any other designation assigned to bodies of water. Islands gain the interest of man because they are different--primarily due to the feeling, or actual fact, of isolation. They are isolated from man's normal living space as well as symbolically isolated by allowing man to leave behind many problem-oriented landscapes.

Island Resources in North Carolina 53-8.20

In 1966 the Bureau of Outdoor Recreation undertook a nationwide inventory of island resources. Basic data for North Carolina islands was obtained from this study. While there are some errors noted, this is the most accurate data available.

It was found that there are 933 islands in the State and they comprise 204,819 acres. The acreage breakdown for types of islands, based on the type of surrounding water is: river--46,255 acres; bay, sound, estuary or ocean--152,842 acres; impoundment--1,831 acres; natural lakes--3,931 acres. These figures provide some insight into the variety of island resources in the State.

There is a broad distribution of islands within the State. Table V-12 summarizes the number and acreage of islands by multi-county planning regions.

TABLE V-12

(53-8.20)

NUMBER AND ACREAGE OF ISLANDS BY REGION

Region	Islands under 10 Acres		Islands 10 Acres or Larger		Total Islands	
	No.	Acres	No.	Acres	No.	Acres
A	2	10	19	726	21	736
B	11	100	4	100	15	200
C	7	60	3	70	10	130
D	-	-	2	25	2	25
E	5	39	8	761	13	800
F	4	20	8	605	12	625
G	26	145	15	745	41	890
H	18	110	17	701	35	811
J	13	100	15	900	28	1,000
K	-	-	2	25	2	25
L	-	-	2	70	2	70
M	-	-	1	70	1	70
N	-	-	-	-	-	-
O	112	855	145	55,515	257	56,370
P	158	1,799	203	66,773	361	68,572
Q	-	-	11	20,590	11	20,590
R	53	364	69	53,541	122	53,905
State Total	409	3,602	524	201,217	933	204,819

There is one region without an island. The coastal regions (regions O, P, Q, and R) have the most island resources in terms of both number of islands and island acreage.

Within the total of 933 islands, there are several that have State and National interest for recreational use.

Cape Hatteras National Seashore — 53-8.21

The Cape Hatteras National Seashore was the first oceanside recreation area of the National Park Service. There are 28,000 acres on the Outer Banks from Oregon Inlet to Ocracoke Island with over 400 miles of total shoreline. The ocean beach shoreline is about 72 miles.

The area has facilities for a variety of activities with the Cape Hatteras Lighthouse serving as the major attraction. Visitation has grown since its dedication in the 1950s with the area now serving in excess of one million visitors a year.

Cape Lookout National Seashore — 53-8.22

This proposed recreation area of the National Park Service is also located on the Outer Banks of North Carolina. It will include the islands from Ocracoke Inlet to Beaufort Inlet. There will be 30,000 acres and 60-70 miles of ocean beach. The State is acquiring the land and now has title to the major portion. In the meantime a general development plan is being prepared to provide for extensive-type recreation activities.

Bogue Banks — 53-8.23

Bogue Banks consists mainly of a single land mass approximately 25 miles long. It is oriented East-West and is about 6,400 acres in size. The major development is in private and commercial vacation cottages but it does have Fort Macon State Park on its eastern tip. There is good access by two bridges; the island thus attracting large numbers of tourists from April to October.

Smith Island, Battery Island and Striking Island 53-8.24

These three islands form a unique complex of islands at the mouth of the Cape Fear River. There is a continuing controversy about the type of use and development that should take place. As unique ocean islands, there is strong pressure for public ownership, preservation of most of the land mass in a natural condition and only very extensive recreation use. Its location, however, makes it attractive as a commercial development for second or vacation homes.

Smith Island is the largest of the group--being about 8 miles long and 11,000 acres in area. Battery and Striking Islands are 60 and 30 acres respectively. All of these islands have extensive marsh and shoal areas with 1/3 or less of the total area being high ground.

Summary 53-8.25

All of these major islands are areas of State and National significance. There is potential for greatly expanded recreation use. In the case of Bogue Banks and Smith Island, there is considerable development already taking place, but improvements in methods, standards and specifications for development are needed before the expansion can be judged wise and prudent.

These barrier islands are a fragile mass of constantly shifting sand and changing vegetation. They are exposed to brutal forces of nature in the form of hurricanes and subtropical storms which are very damaging. Man's unmindful development can and does compound the ravages of nature.

Other island types also are exposed to similar damaging forces but to a lesser degree. The islands in the sounds, while similar to the barrier islands in terms of stability, are protected to some degree from wind and wave action. The river islands are composed of much more stable soil materials and the natural forces

such as floods are not as great as the ocean storms on the coast. This does not suggest that we can limit our concern to the barrier islands because the problems of other islands are less critical. There is merely a difference in the magnitude of the problems involved.

Alteration of the Island Environment — 53-8.26

The point is made that islands are fragile resources, subject to damage and destruction, and the damages are caused by both natural and man made forces. Recreation development can be one of the man-made forces degrading island environments.

In order to lessen the negative impact of recreation development on island resources, the next logical step would be a means of measuring cause and effect so the impact on the environment can be determined prior to project action. This has been attempted and a method is devised in basic outline form. The method includes two considerations. The first is the effects of environmental alteration. The factors to consider are removal of natural vegetation, alteration of existing topography, alteration of physical water characteristics, alteration of bio-chemical water characteristics, and alteration of air quality. The second consideration is the effects of various land uses on the above factors.

A measured impact of various land uses--agriculture, industry, shopping center--can be made as well as a measured impact of various recreation activities--a trail, golf course, campground, wilderness area. This measurement provides values to consider in decision-making involving changes in uses of land. Much data and research is needed to better define the environmental alterations as well as means to measure the relative stability of different islands.

Existing Programs and Controls — 53-8.30

There are no federal, State or local programs designed primarily to protect island resources. Some programs, however, provide relief assistance--after the fact remedies--that need recording. The Federal

government provides beach erosion control projects, flood control works, coastal protection works, flood fighting and rescue operations, protection of essential highways, bridges and public works, and navigation projects. State government provides beach protection and civil works, capital funds program, dune protection program, and dredge and fill regulations and enforcement.

Conclusions 53-8.40

The general conclusion of the study is very well described by a quote from the National Islands Study. "Islands can help fill the recreation need only if the burgeoning urbanization that gives them a new recreation value does not also overwhelm them with the kind of development that makes public recreation impossible. Like all natural islands they are endangered by over development and can serve public needs only if they are protected and developed under active programs of conservation."

In addition, specific conclusions are listed as follows:

1. The development of the State's island resources for recreation use is more desirable than other intensive uses.

2. The islands of the sounds and barrier islands constitute a major portion of the island acreage and should receive priority.

3. The National Islands Inventory provided good basic data but needs to be thoroughly verified and updated.

4. Unless State government acts now to ensure public access through balanced and quality development, the natural island resources of Bogue Banks may soon be overwhelmed and lost forever.

5. The State should support the national recommendation to establish a National System of Island Trusts. Further, it is concluded that a similar Statewide system should be created to augment the National System and provide a means for orderly development.

Chapter VI	60-0.00 thru
Standards and the Identification of Needs	61-1.00

Correlation of Measures of Demand and Supply 61-0.00

As was stated at the outset of Chapter IV, the primary purpose of the demand/supply analysis of the SCORP was to facilitate the comparison of supply data and demand data in order that standards could be established to identify future needs. The preceding chapters dealt with the generation of supply and demand data and the results of the various analytical efforts in both regards. This chapter will relate how both measures of supply and demand were correlated for the development of standards for recreation resource acquisition and development. In addition, this chapter will set forth the present and future needs for additional recreation resources determined by the application of the above mentioned standards.

Methodology 61-1.00

Two major components of the methodology for determining needs for recreation resources were discussed in detail in Chapters IV and V--"Outdoor Recreation Demand" and "Outdoor Recreation Supply".

Demand analysis data concerning the quantity of recreation demand for various categories of recreation areas were generated by means of a household survey of a sample of North Carolina's population. These data were expressed in terms of visitor days.

The supply analysis was basically an inventory that listed and categorized all significant recreation resources in the State. Through the application of facility capacity standards, data reflecting the optimum capacity of the existing supply of recreation areas was generated. These data were in terms of visitor days.

Therefore, the two analyses described above yielded information about the demand for recreation resources and the capacity of the existing supply of those resources to meet that demand--in terms that could be compared.

The method of comparing the two types of data--correlation--basically involved the computation of a simple ratio (d/s ratio) in which the present demand was divided by the capacity of the existing supply. This ratio yields an index of the relative sufficiency of present supply with numbers greater than 1.00 indicating a supply of recreation resources less than demand at a given standard of use (optimum capacity); and, numbers between zero and .99 representing the proportion of recreation supply utilized through existing demand for recreation resources. Index values or d/s ratios were then to be computed for each subclass of recreation areas with the results being utilized to guide the establishment of standards to determine needs.

Recreation "needs" are simply the lack or insufficiency of existing recreation opportunities relative to the amount of such opportunities desired by a population under given conditions. Such needs are a measure of what should be supplied, in addition to what already exists, to satisfy the population--under given conditions.

It is partly through standards that the quality of recreation services is established. It is assumed that for each recreation area there is an intensity of use which, when exceeded, diminished the satisfaction of the users of the area and has detrimental effects upon the area itself. This was considered in the development of prototype park capacity standards. Thus, the standards applied to relate outdoor recreation supply to demand reflect value judgments about the quality of recreation to be provided.

Application of Methodology — 61-2.00

Due to the failure of the demand analysis to provide sufficient demand data on all subclasses of outdoor recreation areas, it was impossible to apply the correlation techniques as outlined in the preceding section. However, d/s ratios were computed for each subclass by multi-county region using reported annual attendance data from the inventory, rather than the inadequate measures of

demand for subclasses of recreation areas contained in the demand analysis. The d/s ratios that were thus computed appear in Tables VI. 1, VI. 2, and VI. 3 for urban outdoor recreation areas, nonurban recreation areas, and all outdoor recreation areas (urban and nonurban) respectively.

Standards for Acquisition and Development 61-3.00

The main goal of the SCORP work efforts regarding the establishment of standards for acquisition and development was to devise a set of reasonable guides--standards--applicable to BOR Classes I, II, and III and their component subclasses. No attempts were made to establish such standards for BOR Classes IV, V, and VI due to the nature of these classes--they are limited to their actual existence and standards are meaningless if the basic resources for these classes do not exist.

The first step in this process was the calculation of base line standards for each subclass by multi-county region. The base line standards were simply a measure of existing supply per unit of population. The data was calculated using the formula:

$$\frac{\text{existing supply in acres}}{\frac{\text{unit population}}{1{,}000}} = \text{base line standard in terms of ac./1,000 population}$$

The data thus computed appears in Tables VI. 4, VI. 5, and VI. 6 by multi-county region and subclass for urban outdoor recreation areas, nonurban outdoor recreation areas, and all outdoor recreation areas (urban and nonurban) respectively.

TABLE VI. 1

(61-2.00)

RELATIVE SUFFICIENCY* OF EXISTING URBAN OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn.Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	-	-	-	-	-	1.670	0.362	0.543	-	0.501	-	0.449
Community Emphasis(b)	-	-	-	-	-	-	0.237	0.240	-	0.355	-	0.268
City Park	-	0.124	-	-	0.124	-	0.378	0.282	-	0.594	-	0.370
District Park	-	-	-	-	-	-	-	-	-	-	-	-
County Park	-	-	-	-	-	-	0.624	0.201	-	0.238	-	0.209
SORA Low	-	0.268	-	-	0.268	-	0.201	0.209	0.116	0.175	-	0.203
SORA Medium	-	0.091	-	-	0.091	-	0.048	0.111	-	-	0.069	0.069
SORA High	-	0.054	-	-	0.054	-	0.074	0.140	-	-	-	0.123
III SORA Low	-	-	-	-	-	-	-	-	-	-	-	-
State Park	-	-	-	-	-	-	-	-	-	-	-	-
Destin. Park	-	-	-	-	-	-	-	-	-	-	-	-
Unique Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wilderness	-	-	-	-	-	-	-	-	-	-	-	-
Historic Cultural	-	-	-	-	-	-	-	0.040	-	0.143	-	0.130

*d/s ratios

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 1 (Cont.)

(61-2.00)

RELATIVE SUFFICIENCY* OF EXISTING URBAN OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	0.147	0.128	0.196	0.207	0.291	0.439	-	0.208	0.377
Community Emphasis(b)	0.153	0.083	-	0.304	0.210	0.540	-	0.199	0.253
City Park	0.106	0.622	-	0.056	0.704	-	-	0.150	0.284
District Park	-	-	-	-	0.007	-	-	0.007	-
County Park	-	9.991	-	-	-	-	-	9.991	0.229
SORA Low	-	0.050	-	0.671	0.062	0.246	-	0.251	0.214
SORA Medium	-	-	-	-	0.071	0.018	-	0.023	0.064
SORA High	0.043	0.005	-	0.038	-	0.040	-	0.033	0.071
III SORA Low	-	1.023	-	-	-	-	-	1.023	1.023
State Park	-	-	-	-	-	-	-	-	-
Destin. Park	-	-	-	-	-	-	-	-	-
Unique Natural	-	-	-	-	-	-	-	-	-
Wilderness	-	-	-	-	-	-	-	-	-
Historic Cultural	9.401	0.046	-	-	-	-	-	2.507	0.173

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 2

(61-2.00)

RELATIVE SUFFICIENCY* OF EXISTING NON-URBAN OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn. Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	0.398	0.194	0.140	0.190	0.191	0.328	0.426	0.216	0.225	0.266	0.189	0.303
Community Emphasis(b)	0.256	0.082	0.217	0.164	0.186	0.188	0.334	0.179	0.100	0.206	0.019	0.206
City Park	0.149	-	1.307	-	0.800	0.111	0.487	0.336	-	0.008	-	0.087
District Park	0.096	-	-	-	0.096	0.032	0.064	0.013	0.038	-	0.128	0.047
County Park	0.048	0.274	0.416	-	0.158	0.256	0.285	0.074	0.054	1.098	0.093	0.088
SORA Low	0.152	0.047	0.371	0.301	0.176	0.429	0.279	0.302	0.116	0.137	0.140	0.255
SORA Medium	0.084	0.808	0.029	0.039	0.040	0.116	0.069	0.038	0.013	0.018	0.069	0.051
SORA High	-	0.344	0.023	0.118	0.032	0.045	0.029	0.019	0.007	0.023	0.091	0.030
III SORA Low	0.007	0.019	0.058	0.040	0.018	0.084	2.840	0.534	2.178	0.436	0.102	0.714
State Park	-	-	-	0.999	0.999	-	1.316	3.908	6.497	2.091	0.839	1.291
Destin. Park	2.541	39.492	44.613	19.691	4.862	25.412	-	5.235	-	-	-	15.646
Unique Natural	0.056	7.657	0.098	-	0.090	9.955	-	2.462	-	-	-	6.030
Wilderness	-	-	-	-	-	0.077	-	-	-	-	-	0.077
Historic Cultural	2.102	0.802	0.143	-	1.661	-	0.563	4.907	0.563	0.025	-	1.587

*d/s ratios

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 2 (Cont.)

(61-2.00)

RELATIVE SUFFICIENCY* OF EXISTING NON-URBAN OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	0.905	0.534	0.196	0.372	1.018	0.254	0.616	0.548	0.352
Community Emphasis(b)	0.608	0.149	0.270	-	1.398	0.120	0.502	0.562	0.272
City Park	0.187	-	-	-	-	-	-	0.187	0.132
District Park	-	0.191	-	-	0.045	-	-	0.105	0.056
County Park	0.135	8.325	0.048	0.167	0.666	-	-	0.113	0.095
SORA Low	0.192	0.189	0.137	0.019	0.262	0.496	0.407	0.155	0.198
SORA Medium	0.023	0.095	0.441	0.020	0.021	0.038	0.136	0.047	0.044
SORA High	0.022	0.057	0.005	0.085	0.038	0.013	0.688	0.026	0.030
III SORA Low	0.056	0.739	0.588	0.026	0.015	0.314	3.337	1.099	0.503
State Park	-	Un.Dev.	18.893	1.706	11.893	-	1.049	8.149	1.689
Destin. Park	-	-	-	-	-	-	8.229	8.229	5.138
Unique Natural	-	-	-	-	-	-	0.012	0.012	0.097
Wilderness	-	-	-	-	-	-	-	-	0.077
Historic Cultural	0.020	-	-	0.559	0.408	0.183	0.426	0.428	0.742

(a) Neighborhood Emphasis Areas -Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 3

(61-2.00)

RELATIVE SUFFICIENCY* OF TOTAL EXISTING OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn. Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	0.398	0.194	0.140	0.190	0.191	0.342	0.387	0.383	0.225	0.421	0.189	0.381
Community Emphasis(b)	0.256	0.082	0.217	0.164	0.186	0.188	0.269	0.226	0.103	0.331	0.019	0.247
City Park	0.149	0.124	1.307	-	0.417	0.111	0.394	0.296	-	0.093	-	0.220
District Park	0.096	-	-	-	0.096	0.032	0.064	0.013	0.038	0.022	0.128	0.050
County Park	0.048	0.274	0.416	-	0.158	0.256	0.409	0.133	0.054	0.398	0.093	0.141
SORA Low	0.152	0.067	0.371	0.301	0.180	0.429	0.249	0.272	0.117	0.144	0.140	0.243
SORA Medium	0.084	0.020	0.029	0.039	0.040	0.116	0.066	0.040	0.013	0.018	0.069	0.052
SORA High	-	0.108	0.023	0.118	0.034	0.045	0.032	0.070	0.007	0.023	0.091	0.042
III SORA Low	0.007	0.019	0.058	0.040	0.018	0.084	2.840	0.534	2.178	0.436	0.102	0.714
State Park	-	-	-	0.999	0.999	-	1.316	3.903	6.497	2.091	0.839	1.291
Destin. Park	2.541	39.492	44.613	19.691	4.862	25.412	-	5.235	-	-	-	15.646
Unique Natural	0.056	7.657	0.098	-	0.090	9.955	-	2.462	-	-	-	6.030
Wilderness	-	-	-	-	-	0.077	-	-	-	-	-	0.077
Historic Cultural	2.102	0.802	0.143	-	1.661		0.563	2.293	0.563	0.129	-	0.546

*d/s ratios

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground.

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 3 (Cont.)

(61-2.00)

RELATIVE SUFFICIENCY* OF TOTAL EXISTING OUTDOOR RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	0.249	0.314	0.196	0.238	0.680	0.324	0.616	0.371	0.364
Community Emphasis(b)	0.294	0.104	0.270	0.304	0.724	0.272	0.502	0.333	0.260
City Park	0.111	0.622	-	0.056	0.704	-	-	0.151	0.219
District Park	-	0.191	-	-	0.009	-	-	0.018	0.030
County Park	0.135	9.713	0.048	0.167	0.666	-	-	0.235	0.148
SORA Low	0.192	0.177	0.138	0.036	0.248	0.428	0.407	0.160	0.200
SORA Medium	0.023	0.095	0.441	0.020	0.022	0.035	0.136	0.047	0.044
SORA High	0.029	0.013	0.005	0.063	0.038	0.028	0.688	0.029	0.037
III SORA Low	0.056	0.384	0.588	0.026	0.015	0.314	3.337	1.099	0.503
State Park	-	Un.Dev.	18.893	1.706	11.893	-	1.049	8.149	1.689
Destin. Park	-	-	-	-	-	-	8.229	8.229	5.138
Unique Natural	-	-	-	-	-	-	0.012	0.012	0.097
Wilderness	-	-	-	-	-	-	-	-	0.077
Historic Cultural	0.743	0.046	-	0.559	0.408	0.183	0.426	0.455	0.544

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 4

(61-3.00)

BASE LINE STANDARDS FOR EXISTING URBAN RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn. Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	-	-	-	-	-	-	1.297	1.374	-	1.275	-	1.322
Community Emphasis(b)	-	-	-	-	-	-	1.195	2.337	-	1.789	-	1.804
City Park	-	1.352	-	-	1.352	-	1.272	0.785	-	0.360	-	0.842
District Park	-	-	-	-	-	-	-	-	-	-	-	-
County Park	-	-	-	-	-	-	0.591	13.052	-	2.361	-	6.013
SORA Low	-	6.605	-	-	6.605	-	6.063	8.243	-	3.285	-	6.212
SORA Medium	-	6.103	-	-	6.103	-	0.622	0.759	-	-	-	0.516
SORA High	-	0.555	-	-	0.555	-	0.650	0.247	-	-	-	0.321
III SORA Low	-	-	-	-	-	-	-	-	-	-	-	-
State Park	-	-	-	-	-	-	-	-	-	-	-	-
Destin. Park	-	-	-	-	-	-	-	-	-	-	-	-
Unique Natural	-	-	-	-	-	-	-	-	-	-	-	-
Wilderness	-	-	-	-	-	-	-	-	-	-	-	-
Historic Cultural	-	-	-	-	-	-	-	0.138	-	1.557	-	0.458

(a) Neighborhood Emphasis Areas- Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 4 (Cont.)

(61-3.00)

BASE LINE STANDARDS FOR EXISTING URBAN RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	1.74[illegible]	0.934	-	0.563	1.716	2.649	-	1.414	1.276
Community Emphasis(b)	2.074	1.738	-	2.144	2.536	1.239	-	1.953	1.745
City Park	1.587	1.476	-	4.332	1.082	-	-	1.866	1.050
District Park	-	-	-	-	14.510	-	-	1.775	0.318
County Park	-	1.084	-	-	-	-	-	0.265	4.699
SORA Low	-	3.812	-	2.816	5.595	9.015	-	3.404	5.728
SORA Medium	-	-	-	-	4.924	3.028	-	1.004	0.867
SORA High	0.550	0.579	-	0.130	-	2.925	-	0.716	0.403
III SORA Low	-	3.364	-	-	-	-	-	0.821	0.147
State Park	-	-	-	-	-	-	-	-	-
Destin. Park	-	-	-	-	-	-	-	-	-
Unique Natural	-	-	-	-	-	-	-	-	-
Wilderness	-	-	-	-	-	-	-	-	-
Historic Cultural	0.267	0.112	-	-	-	-	-	0.105	0.373

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 5

(61-3.00)

BASE LINE STANDARDS FOR EXISTING NON-URBAN RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn. Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	0.235	0.313	0.431	0.682	0.419	0.321	0.697	0.467	0.575	0.318	0.269	0.485
Community Emphasis(b)	0.113	0.205	1.189	0.653	0.568	1.038	0.387	0.652	1.093	0.318	0.254	0.571
City Park	0.452	-	0.579	-	0.251	0.330	0.115	0.518	-	2.741	-	0.654
District Park	0.278	-	-	-	0.055	0.343	1.023	0.134	0.542	2.566	0.373	0.825
County Park	1.426	32.671	0.043	-	9.597	0.849	0.605	9.142	2.991	3.008	1.478	3.889
SORA Low	18,718	49.664	21.963	45.306	34.795	18.039	4.793	15.883	35.869	15.570	9.097	13.726
SORA Medium	114.246	140.408	23.978	170.697	110.056	16.728	6.857	24.096	23.831	7.477	9.493	14.772
SORA High	-	0.030	2.077	0.251	0.647	0.651	1.721	0.346	0.066	0.101	0.119	0.700
III SORA Low	3,719.102	1,130.474	414.719	632.143	1,322.996	394.284	5.365	54.951	379.359	14.400	126.869	100.175
State Park	-	-	-	35.325	8.451	-	10.546	13.301	3.312	17.321	13.247	10.942
Destin. Park	2,452.227	34.395	8.781	193.651	542.750	4.323	-	1.525	-	-	-	0.988
Unique Natural	33.384	0.078	27.429	-	14.254	0.440	-	0.182	-	-	-	0.109
Wilderness	-	-	-	-	-	33.267	-	-	-	-	-	3.922
Historic Cultural	0.591	0.030	0.043	-	0.137	-	0.151	0.430	0.485	0.172	-	0.235

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 5 (Cont.)

(61-3.00)

BASE LINE STANDARDS FOR EXISTING NON-URBAN RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	0.273	0.253	0.853	0.127	0.258	0.481	0.308	0.344	0.426
Community Emphasis(b)	0.311	0.284	0.465	-	0.355	0.361	0.277	0.310	0.480
City Park	0.186	-	-	-	-	-	-	0.025	0.374
District Park	-	0.387	-	-	0.263	-	-	0.148	0.472
County Park	2.958	0.142	2.909	5.550	0.522	-	-	1.431	3.892
SORA Low	16.413	13.814	17.584	129.376	11.239	6.430	20.164	24.325	20.608
SORA Medium	4.427	2.177	4.176	125.024	10.203	6.704	6.300	17.296	30.038
SORA High	0.420	0.024	0.259	0.135	0.120	0.541	0.010	0.199	0.517
III SORA Low	158.942	99.268	271.340	79.280	643.106	245.856	1,728.731	413.924	394.332
State Park	-	4.282	15.819	2.680	4.865	-	178.496	17.146	12.729
Destin. Park	-	-	-	-	-	-	224.045	16.179	88.080
Unique Natural	-	-	-	-	-	-	125.383	9.054	5.368
Wilderness	-	-	-	-	-	-	-	-	1.960
Historic Cultural	0.191	-	-	6.770	0.125	0.147	4.666	1.049	0.504

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 6

(61-3.00)

BASE LINE STANDARDS FOR EXISTING TOTAL RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn. Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	0.235	0.233	0.431	0.682	0.381	0.321	0.921	0.815	0.575	0.751	0.269	0.760
Community Emphasis(b)	0.113	0.152	1.189	0.653	0.517	1.038	0.688	1.299	1.093	0.984	0.254	0.977
City Park	0.452	0.349	0.579	-	0.350	-	0.547	0.621	-	1.663	-	0.716
District Park	0.278	-	-	-	0.050	0.343	0.641	0.083	0.542	1.404	0.373	0.554
County Park	1.426	24.242	0.043	-	8.733	0.849	0.600	10.644	2.991	2.716	1.478	4.588
SORA Low	18.718	38.555	21.963	45.306	32.255	18.039	5.267	12.917	35.869	10.007	9.097	11.253
SORA Medium	114.246	105.758	23.978	170.697	100.690	16.728	4.531	15.133	23.831	4.092	9.493	10.080
SORA High	-	0.165	2.077	0.251	0.639	0.651	1.322	0.308	0.066	0.055	0.119	0.575
III SORA Low	3,719.102	838.820	414.719	632.143	1,322.996	394.284	3.364	33.845	379.359	7.880	126.869	67.204
State Park	-	-	-	35.325	7.689	-	6.612	8.192	3.312	9.478	13.247	7.337
Destin. Park	2,452.227	25.522	8.781	193.651	493.852	4.323	-	0.939	-	-	-	0.663
Unique Natural	33.384	0.058	-	-	14.254	0.440	-	0.112	-	-	-	0.073
Wilderness	-	-	-	-	-	33.267	-	-	-	-	-	2.631
Historic Cultural	0.591	0.022	0.043	-	0.125	-	0.095	0.318	0.485	0.799	-	0.308

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhoo Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 6 (Cont.)

(61-3.00)

BASE LINE STANDARDS FOR EXISTING TOTAL RECREATION AREAS
BY MULTI-COUNTY REGION AND SUBCLASS, 1971

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst. Reg. Total	State Total
Neighbhd Emphasis(a)	0.652	0.373	0.853	0.244	0.354	0.834	0.308	0.493	0.630
Community Emphasis(b)	0.766	0.538	0.465	0.575	0.497	0.504	0.277	0.540	0.713
City Park	0.547	0.258	-	1.161	0.071	-	-	0.283	0.536
District Park	-	0.320	-	-	1.195	-	-	0.375	0.435
County Park	2.196	0.307	2.909	4.063	0.488	-	-	1.268	4.087
SORA Low	12.182	12.069	17.584	95.464	10.870	6.851	20.164	21.397	17.026
SORA Medium	3.286	1.797	4.176	91.524	9.858	6.106	6.300	15.017	23.017
SORA High	0.454	0.121	0.259	0.133	0.112	0.929	0.010	0.271	0.490
III SORA Low	117.970	82.534	271.340	58.037	601.066	205.863	1,728.731	356.127	299.456
State Park	-	3.535	15.819	1.962	4.547	-	178.496	14.747	9.665
Destin. Park	-	-	-	-	-	-	224.045	13.916	66.880
Unique Natural	-	-	-	-	-	-	125.383	7.788	4.076
Wilderness	-	-	-	-	-	-	-	-	1.489
Historic Cultural	0.211	0.020	-	4.956	0.117	0.123	4.666	0.917	0.473

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini-Park, Playground, Neighborhood Park, Combined Neighborhood Park & Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

By comparing the base line standards and the d/s ratios, it was possible to obtain an idea of what level of planning standard--that standard used to determine needs--was required to define a quantity of outdoor recreation resources capable of satisfying the measured demand. Further analysis of this comparison in light of existing planning standards and planning judgment enabled the establishment of planning standards for use in North Carolina. The standards thus derived appear in Table VI. 7 for BOR Classes I, II, and III and their component subclasses. It must be pointed out that the aggregate needs developed from these standards represent the responsibilities of all levels of government and the private and commercial sectors for the provision of outdoor recreation opportunities.

TABLE VI. 7

(61-3.00)

OUTDOOR RECREATION AREA PLANNING STANDARDS

Outdoor Recreation Area Category	BOR Class	Acres Per 1,000 Population Planning Standard
Neighborhood Emphasis	I	2.5 ac/1,000 pop.
Community Emphasis	I	2.5 ac/1,000 pop.
City Park	I	5.0 ac/1,000 pop.
Total BOR I----------		10.0 ac/1,000 pop.
District Park	II	2.5 ac/1,000 pop.
County Park	II	10.0 ac/1,000 pop.
SORA-Low	II	8.0 ac/1,000 pop.
SORA-Medium	II	20.0 ac/1,000 pop.
SORA-High	II	2.0 ac/1,000 pop.
Total BOR II----------		42.5 ac/1,000 pop.
III SORA-Low	III	150.0 ac/1,000 pop.
State Park	III	15.0 ac/1,000 pop.
Destination Park	III	125.0 ac/1,000 pop.
Total BOR III ----------		290.0 ac/1,000 pop.

Present and Future Acquisition and Development Needs 62-0.00

Using the standards that were developed by methods explained in the previous sections of this chapter, needs for outdoor recreation resources and areas by subclass and multi-county region were computed. These needs represent the additional quantity of recreation resources that should be provided by some level of resource management category by or before the years for which the needs were computed.

In order to consider both present and future needs for recreation areas, the standards were applied to figures representing expected population levels in 1976 and 1986 as well as to the 1970 population (used as the 1971 figure) of North Carolina. Thus, present, short range and intermediate range needs were established. Due to the magnitude of present needs coupled with the inherent hazards of projecting such data over time, long range needs--those considered in context of the year 2020--were not computed.

Tables VI. 8, VI. 9, and VI. 10 present these needs identified by subclass and multi-county region for the years 1971, 1976 and 1986 respectively.

Different "populations" were considered in the computation of needs for the various subclasses. Since the subclasses comprising BOR Class I primarily serve urban concentrations of persons, only population figures representing persons residing in incorporated places of 2,500 or more were used in computing BOR Class I needs. These figures show that approximately 45% of North Carolina's population falls in this category.

Needs for the subclass "District Park" were computed using a population figure representing the rural farm and rural nonfarm composition of the State's inhabitants--about 55% of the total

State population. This was done in order to consider the needs of rurally oriented people for BOR Class I type outdoor recreation opportunities--opportunities provided by recreation areas designated as district parks.

Needs for all other subclasses comprising BOR Class II and Class III were computed using total population; urban, rural nonfarm, and rural farm.

TABLE VI. 8
(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1971
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn.Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	117	228	140	117	602	223	619	744	106	425	135	2,252
Community Emphasis(b)	123	236	117	120	597	150	710	549	82	369	136	1,995
City Park	236	468	323	314	1,341	477	1,743	1,934	273	878	302	5,608
Total (1) Class I	476	932	580	550	2,539	851	3,072	3,227	461	1,672	572	9,855
District Park	140	307	223	193	863	270	996	1,311	131	664	159	3,532
County Park	1,099	785	1,615	1,393	4,892	2,082	8,179	3,356	912	3,939	1,142	19,610
SORA Low	-1,234	-6,832	-2,266	-5,199	-0-*	-2,282	2,378	-4,826	-3,392	-1,085	-147	2,378*
SORA Medium	-10,965	-19,174	-645	-21,002	-0-*	1,944	13,460	4,777	-466	8,600	1,407	30,188*
SORA High	230	410	-13	243	833*	307	589	1,662	236	1,050	253	4,097*
Total(1) Class II	1,469	1,502	1,038	1,829	6,638	4,603	25,602	11,106	1,279	14,253	2,961	59,805
III SORA Low	-410,532	-154,004	-42,958	-67,193	-0-*	-55,550	127,594	113,993	-27,912	76,830	3,100	321,517*
State Park	1,726	3,354	2,434	-2,832	7,514*	3,410	7,299	6,680	1,422	2,985	234	22,030
Destin. Park	-267,686	22,241	18,860	-9,566	-236,151	27,442	108,769	121,753	15,211	67,574	16,749	357,498
Total (1) Class III	-	-	-	-	7,514	-	-	-	-	-	-	701,045
REGION TOTAL (1)	-	-	-	-	16,691	-	-	-	-	-	-	770,705

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 8 (cont.)

(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1971
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst.Reg. Total	State Total
Neighbhd Emphasis(a)	210	293	114	175	396	145	96	1,430	4,284
Community Emphasis(b)	193	270	162	149	369	164	97	1,405	3,997
City Park	495	645	348	298	910	403	219	3,317	10,266
Total (1) Class I	898	1,209	624	621	1,675	712	412	6,152	18,547
District Park	340	367	212	237	391	246	134	1,926	6,321
County Park	1,926	2,973	1,096	1,253	3,902	1,786	974	13,910	38,412
SORA Low	-1,032	-1,248	-1,483	-15,071	-1,177	205	-1,183	205*	2,583
SORA Medium	4,126	5,582	2,449	-12,324	4,159	2,484	1,332	20,132*	50,320
SORA High	382	576	270	321	774	191	195	2,709*	7,689
Total (1) Class II	6,774	9,498	4,027	1,811	9,226	4,912	2,635	38,882	105,325
III SORA Low	7,906	20,689	11,230	15,845	-184,993	-9,981	-153,542	55,670*	377,187
State Park	3,702	3,516	-126	2,246	4,487	2,681	-15,908	16,632*	46,176
Destin. Park	30,856	38,332	19,336	21,539	51,265	22,334	9,636	174,026	295,373
Total (1) Class III	-	-	-	-	-	-	-	246,328	718,736
REGION(1) TOTAL	-	-	-	-	-	-	-	291,362	842,608

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

Special Notes for Tables VI. 8, VI. 9, and VI. 10

(1) Totals may not add due to rounding

*Minus figures counted as zero in deriving total because an oversupply in one multi-county region is not considered capable of contributing to making up for a deficiency in another multi-county region.

Additional note: For subclasses "Neighbhd Emphasis", "Community Emphasis", "City Park", "District Park", and "County Park" the multi-county region totals are not necessarily a true sum of all county totals in that region because an oversupply in one county is not considered capable of contributing to making up for a deficiency in another county. Destination Park total for the State is a true total which counts minus figures into total because they are considered statewide in service area.

TABLE VI.
(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1976
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn.Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	126	251	147	124	648	243	688	826	110	449	133	2,449
Community Emphasis(b)	133	260	124	127	644	163	789	609	86	389	134	2,171
City Park	254	515	341	333	1,443	521	1,939	2,147	285	927	296	6,115
Total (1) Class I	513	1,026	612	583	2,735	928	3,416	3,582	481	1,766	562	10,735
District Park	151	338	235	204	928	295	1,108	1,455	137	701	156	3,852
County Park	1,185	864	1,704	1,477	5,230	2,271	9,095	3,725	951	4,160	1,121	21,323
SORA Low	-1,138	-6,142	-2,141	-4,887	-0-*	-2,074	2,644	-4,295	-3,246	-1,024	-150	2,644*
SORA Medium	-10,965	-17,237	-610	-19,742	-0-*	2,121	14,968	5,302	-446	9,082	1,382	32,855*
SORA High	248	451	-12	258	957*	335	655	1,845	246	1,109	248	4,438*
Total (1) Class II	1,584	1,654	1,939	1,938	7,115	5,022	28,470	12,328	1,335	15,051	2,907	65,112
III SORA Low	-378,511	-138,450	-40,595	-63,161	-0-*	-50,495	141,885	126,532	-26,712	81,132	3,044	352,593*
State Park	1,861	3,693	2,568	-2,662	8,122*	3,410	8,116	7,415	1,483	3,152	230	23,806*
Destin. Park	-246,806	24,487	19,897	-8,992	-211,414	29,939	120,951	135,146	15,865	71,358	16,448	389,707
Total (1) Class III	-	-	-	-	8,122	-	-	-	-	-	-	766,106
REGION TOTAL (1)	-	-	-	-	17,972	-	-	-	-	-	-	841,954

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 9 (Cont.)
(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1976
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst.Reg. Total	State Total
Neighbhd Emphasis(a)	209	306	115	183	405	148	98	1,463	4,561
Community Emphasis(b)	192	282	163	156	378	167	99	1,437	4,252
City Park	492	872	351	312	930	411	224	3,408	10,949
Total (1) Class I	893	1,260	629	651	1,712	727	421	6,293	19,762
District Park	338	383	214	248	399	251	136	1,969	6,750
County Park	1,916	3,098	1,106	1,312	3,988	1,822	994	14,236	40,789
SORA Low	-1,037	-1,196	-1,470	-14,363	-1,151	209	-1,158	209	2,853
SORA Medium	4,105	5,816	2,471	-11,775	4,250	2,534	1,360	20,536	53,391
SORA High	380	600	272	336	791	195	199	2,773	8,168
Total (1) Class II	6,740	9,898	4,064	1,896	9,428	5,010	2,690	39,726	111,954
III SORA Low	7,866	21,558	11,331	16,590	-180,923	-9,781	-150,318	57,345	409,938
State Park	3,683	3,664	-125	2,352	4,586	2,735	-15,574	17,020	48,948
Destin. Park	30,702	39,942	19,510	22,551	52,393	22,781	9,838	197,717	376,010
Total (1) Class III	-	-	-	-	-	-	-	272,082	834,896
REGION TOTAL (1)	-	-	-	-	-	-	-	318,101	966,609

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI.

(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1986
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions											
	A	B	C	D	Mtn.Reg. Total	E	F	G	H	J	K	Pd. Reg. Total
Neighbhd Emphasis(a)	144	294	163	137	738	280	799	968	120	531	135	2,833
Community Emphasis(b)	151	304	136	141	732	188	917	714	93	461	136	2,509
City Park	290	604	376	368	1,638	599	2,250	2,516	310	1,097	301	7,073
Total (1) Class I	585	1,202	675	644	3,106	1,069	3,966	4,198	523	2,088	571	12,415
District Park	172	396	260	226	1,054	339	1,286	1,706	149	829	159	4,468
County Park	1,350	1,013	1,880	1,631	5,874	2,615	10,559	4,366	1,035	4,920	1,140	24,635
SORA Low	-953	-4,851	-1,894	-4,310	-0-	-1,698	3,070	-3,373	-2,934	-815	-147	3,070
SORA Medium	-8,465	-13,614	-539	-17,411	-0-	2,442	17,377	6,215	-403	10,741	1,404	38,179
SORA High	282	529	-11	285	1,096	386	760	2,162	268	1,311	252	5,139
Total (1) Class II	1,804	1,938	2,140	2,142	8,024	5,782	33,052	14,449	1,452	17,801	2,955	75,491
III SORA Low	-316,931	-109,343	-35,913	-55,703	-0-	-41,329	164,724	148,305	-24,144	95,961	3,094	412,084
State Park	2,120	4,327	2,833	-2,348	9,280	4,283	9,423	8,691	1,614	3,728	234	27,928
Destin. Park	-206,554	28,691	21,953	-7,930	-163,840	34,467	140,421	158,401	17,264	84,400	16,716	451,669
Total (1) Class III	-	-	-	-	9,280	-	-	-	-	-	-	891,681
REGION TOTAL (1)	-	-	-	-	20,410	-	-	-	-	-	-	979,587

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

TABLE VI. 10 (Cont.)

(62-0.00)

NET OUTDOOR RECREATION NEED IN ACRES - 1986
BY OUTDOOR RECREATION AREA SUBCLASS AND BY MULTI-COUNTY REGION

Class & Subclass	Multi-County Regions								
	L	M	N	O	P	Q	R	Cst.Reg. Total	State Total
Neighbhd Emphasis(a)	212	331	119	199	430	155	102	1,548	5,119
Community Emphasis(b)	195	305	169	169	401	175	103	1,518	4,759
City Park	499	728	364	339	988	431	233	3,582	12,293
Total (1) Class I	905	1,365	653	706	1,819	762	439	6,649	22,170
District Park	343	414	222	269	425	263	143	2,079	7,601
County Park	1,941	3,357	1,146	1,425	4,238	1,911	1,037	15,055	45,564
SORA Low	-1,024	-1,087	-1,415	-13,006	-1,076	219	-1,106	219	3,289
SORA Medium	4,159	6,302	2,562	-10,636	4,517	2,658	1,419	21,617	59,796
SORA High	385	650	282	365	841	204	208	2,935	9,170
Total (1) Class II	6,828	10,723	4,212	2,059	10,021	5,255	2,807	41,905	125,420
III SORA Low	7,969	23,358	11,747	18,016	-169,084	-9,282	-143,562	61,090	473,174
State Park	3,772	3,970	-120	2,554	4,873	2,869	-14,874	18,038	55,246
Destin. Park	31,103	43,277	20,225	24,490	55,674	23,897	10,262	208,928	496,757
Total (1) Class III	-	-	-	-	-	-	-	288,056	1,025,177
REGION TOTAL (1)	-	-	-	-	-	-	-	336,610	1,172,668

(a) Neighborhood Emphasis Areas - Combined Subclasses: Mini Park, Playground, Neighborhood Park, Combined Neighborhood Park and Playground

(b) Community Emphasis Areas - Combined Subclasses: Community Park, Playfield

Chapter VI	63-0.00 thru
Standards and the Identification of Needs	63-1.00

Present and Future Requirements 63-0.00

In order to view the needs that were identified in the previous section in meaningful terms, it was necessary to estimate the amount of the aggregate dollar investment that will be required of all operational sectors to meet the specified needs. No attempt has been made in this chapter to assign responsibilities for present and future requirements.

Method for Determining Costs 63-1.00

Cost estimates were determined for the identified needs through a process involving analysis of past facility costs, analysis of prototype park development criteria, and the correlation of these analyses to derive reasonable cost figures for acquisition and development of the various subclasses on a per acre basis.

The major source of facility cost data was the State files containing data on all past and current LWCF projects in North Carolina. In addition to this, other sources included publications on the subject by the Federal Power Commission and the Bureau of Outdoor Recreation.

Land acquisition costs were computed for each subclass by considering differential prices due to overall parcel size and location with respect to major population concentrations. Development costs were computed on a facility-type basis with the individual facility cost figures remaining essentially equal for the analysis of the various subclasses.

There was not sufficient data to facilitate a breakdown of development costs by geographic region of the State--an analysis which would surely point out differential development costs due to the varying physiographic characteristics of each region. However, it is felt that some accounting of this factor was made by computing a range of development cost figures for each subclass; low cost, average cost, and high cost.

Anticipated Costs 63-2.00

The total acquisition and development cost estimates thus derived appear in Table VI. 11. These "total" cost figures represent application of the average acquisition and development cost figures to the total needs figures. For contrast, the minimum costs are also presented.

It is reiterated that the cost figures appearing in Table VI. 11 cover only existing (1971) needs. Due to their magnitude no attempt was made to apply the per acre cost estimates to future needs in order to determine future cost requirements.

These cost figures must also be interpreted as representing "optimum development" as defined by the prototype park development criteria. In many cases, particularly in BOR Class I, this optimum degree of development may not be feasible considering the financial capabilities of the different management levels.

TABLE VI. 11

(63-2.00)

COST ESTIMATES OF INVESTMENT REQUIRED TO MEET 1971 NEEDS

Class & Subclass	Statewide Needs-Acres	A & D Cost Per Acre	Total Cost Estimate	Minimum Cost Estimate
Neighbhd Emphasis	4,283	$10,655	$ 45,635,000	$ 25,655,000
Community Emphasis	3,997	$ 8,928	$ 35,685,000	$ 23,287,000
City Park	10,266	$ 8,716	$ 89,478,000	$ 64,563,000
Total Class I	18,546	$ 9,433	$170,789,000	$113,500,000
District Park	6,321	$17,999	$113,772,000	$ 74,999,000
County Park	38,412	$ 2,457	$ 94,378,000	$ 74,250,000
SORA Low	2,583	$ 6,597	$ 17,040,000	$ 11,366,000
SORA Medium	50,320	$ 4,833	$243,197,000	$162,212,000
SORA High	7,689	(c)	(c)	(c)
Total Class II	105,325	$ 7,972(d)	$468,387,000(d)	$322,827,000
III SORA Low	377,187	$ 500	$188,594,000	$150,875,000
State Park	46,176	$ 902	$ 44,651,000	$ 27,781,000
Destin. Park	295,373	(a)	(a)	(a)
Total (b) Class III	423,363	$ 701(b)	$233,245,000(b)	$178,656,000(b)
State Totals	547,234(b)	N.A.	$872,421,000(b)(d)	$614,983,000(b)(d)

(a) "Destination Parks" are basically large National Parks. Due to the nature of these areas, no cost estimates were computed.

(b) Excluding "Destination Parks"

(c) Due to the nature of SORA High areas, a reasonable cost figure was incalculable.

(d) Excluding "SORA High"

Chapter VII	70-0.00 thru
Plan Formulation	71-0.00

Purpose 71-0.00

The purpose of this chapter is to develop a policy framework from which an action program can be derived to meet identified needs and deficiencies for outdoor recreation services and facilities. The policy framework will be developed through an analysis of the interrelationships between outdoor recreation objectives, present roles of the public, private and commercial sectors and problems and opportunities. From this analysis, policy priorities will be developed, thus completing the framework from which specific actions can be determined.

It is imperative that statewide comprehensive outdoor recreation planning be an integral element of the overall growth planning process of State government. The North Carolina General Assembly of 1971, in response to the citizenry's desire for examining and determining the course of the future, created a Council of State Goals and Policies to study the resources and means of action and policies available to State government. This Council is chaired by the Governor, and its members are appointed from a cross section of representative citizen groups and interests. The Council became officially functional in March of 1972.

Thus far, the Council has only had sufficient time to propound the various State growth needs and issues in a very general context. Nevertheless, the Council has committed itself to the broad objective of upgrading both the quality-of-life and the environment for all North Carolinians. In line with this general posture, the Council has recognized the need of developing a system of growth centers in areas adversely affected by extensive rural-to-urban migration and where the level of public services has traditionally been low. In its efforts of deliberating and defining State goals and policies, the Council has also recognized the need of working with the local governments and their multi-county regional organizations in a planning partnership.

As the Council on State Goals and Policies proceed with the identification of courses of action for the betterment of North Carolina, State comprehensive outdoor recreation planning will be part of the process for establishing criteria and developing priorities for community growth throughout the State. Recreation development must be a catalyst for improving the quality-of-life of the people it is meant to serve.

Chapter VII	72-0.00 thru
Plan Formulation	72-1.20

Outdoor Recreation Objectives 72-0.00

The State has three broad and complementary objectives with respect to outdoor recreation--providing outdoor recreation opportunities for the people, preserving outdoor recreation areas for the use of people, and achieving these functions in the best manner possible. All levels of government (Federal, State, local) and the private sector will be involved in the attainment of these objectives; however, the State assumes primary responsibility, either by directly accomplishing the objectives or working toward their accomplishment with other levels of government and the private sector.

Provision of Outdoor Recreation Opportunities 72-1.00

Residents and Visitors 72-1.10

It is an objective of the State to provide, or facilitate the provision of, outdoor recreation facilities for all its citizens and visitors. It is an intrinsic part of this objective that outdoor recreation opportunities should be provided for those persons with mental, physical, or economic disability and for those who have been institutionalized.

Area/Facility Accessibility 72-1.20

It is an objective of the State that outdoor recreation areas and facilities should be distributed in such a way as to be geographically and economically accessible to the population. In practice, this means that each broad type of outdoor recreation opportunity should be located to conform to standards of time and distance specified for its class of site.

Chapter VII — Plan Formulation — 72-1.30 thru 72-1.60

Quality — 72-1.30

It is an objective of the State to stress the highest quality of development in each recreation area in order to serve citizens well and to provide a standard for other recreation areas. Different types of areas will naturally receive the type of development that is most appropriate.

Variety of Types of Areas — 72-1.40

It is an objective of the State to make its natural resources available to the public in a variety of ways and to facilitate the action of other levels of government and private enterprise to do the same in order that differing tastes for outdoor recreation may be satisfied as fully as possible.

Professional Leadership — 72-1.50

It is an objective of the State that positions of recreation planning, administration, programming and supervision be staffed by persons of special competence in recreation by virtue of their education and experience.

Finances — 72-1.60

It is an objective of the State that outdoor recreation be recognized as a necessary public expenditure at both the State and local levels of government. Moreover, it is an objective of the State to encourage investment by the private sector in sites to provide outdoor recreation for the people.

Research and Education — 72-1.70

It is an objective of the State to conduct and to encourage others to conduct research and education relating to outdoor recreation so that the needs and desires of the people are recognized and met as fully and as effectively as possible.

Acquisition, Preservation, and Maintenance of Recreation Opportunities in Accordance With Optimum Requirements for Environmental Quality — 72-2.00

Unique Natural, Scenic and Historic/Cultural Areas — 72-2.10

It is an objective of the State to acquire adequate examples of natural outdoor features and to preserve them in as close to a natural state as is feasible. Furthermore, it is an objective of the State that such natural features be made accessible to the public for the purpose of outdoor recreation to the extent that such use does not destroy or degrade the resource. In particular, such areas should represent the unique or distinctive plant or animal communities found in the State, as well as other natural, scenic, and historic/cultural features. The State will be partially responsible for achieving this goal directly. It is expected that other levels of government, and to some extent the private sector, will also share in this responsibility.

High Density Urban Areas — 72-2.20

It is an objective of the State that adequate amounts of recreation opportunities be made available to the increasing urban population of the State. In particular, priority consideration must be given to acquisition and development of outdoor recreation sites in low-income, economically deprived urban areas. The State will seek to attain this goal primarily by facilitating local government action.

Accessibility to Public Domain — 72-2.30

It is an objective of the State that areas of public access be provided along the shores of streams, rivers, lakes, estuaries, sounds, and the ocean in order that citizens and visitors may be able to reach and use inland waters and the Atlantic Ocean. Among these, special emphasis must be placed on insuring public access to ocean beaches and to State lakes.

All governmental units providing public recreation opportunities should consider ways and means of insuring that no person is denied use of any public recreation area, facility, or program because of their inability to pay the established fees.

Environmental Enhancement for Living — 72-2.40

It is an objective of the State that development and growth be planned and accomplished with an awareness of ecological principles and through adherence to development and management criteria that eliminate, or mitigate, detrimental effects on the environment.

Effective and Efficient Resource Use in Achieving Recreation Objectives — 72-3.00

Continuing Statewide Planning — 72-3.10

It is an objective of the State not only to produce periodic plan documents for the outdoor recreation program of the State, but also to use principles and conclusions summarized in those documents as guides for daily decision-making in the management of the State outdoor recreation program. It is the purpose of continuing planning to identify needs, set priorities, and evaluate programs or projects designed to meet priority needs.

Present Outdoor Recreation Roles 73-0.00

It has often been observed that no single sector-public, private, or commercial--and no single level of government--Federal, State, or local--can meet the total needs for outdoor recreation. Rather, it takes the cooperative efforts of all. In order for such cooperative efforts to be effective, there is need for a clear definition, understanding, and acceptance of roles of the various sectors and governmental levels in providing outdoor recreation opportunities. Each sector has, in varying degrees, established precedents for its specific share of the total outdoor recreation load. The following is a brief description of the type and degree of contribution to outdoor recreation opportunities that each sector presently makes.

In terms of outdoor recreation supply, the roles of all public and private sectors are summarized in Table VII-1, which provides totals of sites and acreage for all classes of outdoor recreation areas and for all operator classifications. The inset for this table illustrates the relative significance of each of these factors in terms of totals for the State.

TABLE VII-1

(73-0.00)

EXISTING OUTDOOR RECREATION SUPPLY IN SITES AND ACRES--1971
STATE TOTAL BY BOR CLASS AND OPERATOR CLASS

BOR Class	FEDERAL				STATE				LOCAL				COMMERCIAL & PRIVATE				TOTAL	
	Sites		Acres		Sites		Acres		Sites		Acres		Sites		Acres			
	No.	% of Tot.	Number	% of Tot.	No.	% of Tot.	Number	% of Tot.	No.	%of Tot.	Number	% of Tot.	No.	% of Tot.	Number	% of Tot.	Sites	Acres
I					1	.10	37	.37	688	73.6	8,247	83.18	246	26.3	1,631	16.45	935	9,915
II	50	4	3,562	1.6	79	6	4,654	2	87	6	21,864	9.6	1,135	84	197,813	86.8	1,351	227,893
III	72	36	1,477,516	78	39	19.5	151,766	8	1	.5	22	0*	88	44	268,209	14	200	1,897,513
IV	3	37.5	16,040	77.4	2	25	4,310	20.8					3	37.5	364	1.8	8	20,714
V	2	100	20,915	100													2	20,915
VI	3	8.6	695	29.3	18	51.4	1,442	60.8	6	17.1	123	5.2	8	22.9	112	4.7	35	2,372
TOTAL	130		1,518,728		139		162,209		782		30,256		1,480		468,129		2,531	2,179,322
% of Total		5.1		69.8		5.5		7.4		30.9		1.4		58.5		21.4		

*Per cent so small it is considered insignificant

Note: All of the Game Lands managed by the North Carolina Wildlife Resources Commission are not included in these figures.

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* Indicates top supplier in the State

() Indicates tie for top supplier

BOR Class	FEDERAL		STATE		LOCAL		COMMERCIAL & PRIVATE	
	% Sites	% Acres	% Sites	% Acres	% Sites	% Acres	% Sites	% Acres
I					74*	83*	26	17
II	4	1.6	6	2	6	9.6	84*	86.8*
III	36	78*	19.5	8	.5		44*	14
IV	(37.5)	77.4*	25	20.8			(37.5)	1.8
V	100*	100*						
VI	8.6	29.3	51.4*	60.8*	17.1	5.2	22.9	4.7
Total	5.1	69.8*	5.5	7.4	30.9	1.4	58.5*	21.4

Chapter VII — 73-1.00 thru 73-1.22
Plan Formulation

State 73-1.00

Results of 1971 Inventory Operator Classifications 73-1.10

In terms of existing outdoor recreation supply conditions in North Carolina, the State is fulfilling the following roles:

1. The primary supplier of Class VI outdoor recreation areas in terms of both number of sites (51.4% of total) and total acreage (60.8% of total).
2. A provider of, in descending order of magnitude (acres and sites) Classes IV, III, and II and I outdoor recreation areas.
3. The operator of 5.5% of the total outdoor recreation sites in North Carolina and 7.4% of the total acreage.

Outdoor Recreation Roles of State Government 73-1.20

The Governor's Council on State Goals and Policy 73-1.21

The Governer's Council on State Goals and Policy is an appointed body of fifteen members to advise the Governor of North Carolina's needs and on long-range planning to meet these needs. The Council might choose to study needs for outdoor recreation and to place them in the framework of the whole range of State responsibilities. The Council's annual report, which appears each December, could include recommendations for planning, legislation, and financial assistance.

Department of Administration 73-1.22

Statewide Development Policy is being prepared by the Department of Administration. The goal of this work is to produce a plan to guide the future development of the State. The guiding principles are to assure a good balance of people,

jobs, and services in all areas by avoiding the trend toward depopulation of rural areas and over-concentration in the largest urban centers. This is to be achieved by concentrating development investments in smaller urban centers all over the State which have good growth potential. In the future this policy, and planning derived from it, will help determine the best location for recreation facilities.

The Office of State Planning carries out research, planning, coordination, and technical assistance in several areas related to outdoor recreation.

Coordination among State and Federal agencies concerned with outdoor recreation is effected through the Office of State Planning and the A-95 Clearinghouse process. The State Clearinghouse receives notice of most requests for Federal grants and circulates them for comments, thereby providing for inter-agency coordination and the circulation of planning information. This process helps to bring the effect of various projects on recreation opportunities into the open, whether the effect is positive or negative. Projects can then be evaluated with full knowledge of their consequences.

The Land and Water Conservation Fund Review Committee (formerly the Recreation Planning Task Force), reviews all Land and Water Conservation Fund projects. LWCF Committee membership represents all major State agencies concerned with outdoor recreation, the North Carolina League of Municipalities, and the North Carolina Association of County Commissioners. These same agencies coordinate and contribute to the overall statewide comprehensive outdoor recreation planning effort.

The Office of State Planning provides technical assistance to the State's seventeen multi-county planning regions which will include recreation needs in their comprehensive planning programs.

Environmental planning activities such as determining indicators of environmental quality and conducting studies of the environmental impact of subdivisions seek to maintain the high environmental quality that is essential to outdoor recreation.

The Economic Analysis and Information Service provides projections of populations, economic activity, and government revenues which are useful in planning recreation investments.

The North Carolina Zoological Authority is just beginning its task of acquiring, constructing, establishing and operating a State Zoo. The Authority has acquired a 1371 acre site which now serves as an undeveloped recreation area in Randolph County. A family recreation area will be completed in fiscal year 1973 and the Zoo will follow shortly thereafter.

Department of Agriculture — 73-1.23

The State Fair is administered by the Department of Agriculture. The Fair, held every October, provides entertainment and educational exhibits for visitors. The Fairground facilities are available for other activities on a rental basis.

Department of Art, Culture, and History — 73-1.24

The Office of Archives and History undertakes research of historic sites in North Carolina. The Director of the Office serves as the State Liaison Officer for Historic Preservation, nominating North Carolina sites for the National Register of Historic Places.

The Office plans, acquires, develops, and operates State Historic Sites open to the public. Historic sites range from single structures to sizable areas such as battlegrounds. Exhibits and interpretive programs are provided. At present, sixteen historic sites are in operation. Planning for others is underway and budget requests have been made for their acquisition and development.

Some twenty-five Historical and Commemorative Commissions are active throughout the State, each concerned with a particular area, site, historical period, or historical character. These formerly independent commissions have been brought together into one division by the reorganization of State Government. The Department now intends to provide increased research and support services to the Commissions.

Department of Transportation 73-1.25

The Highway Commission provides the primary transportation link to outdoor recreation facilities--our highway system. The Commission also constructs and operates rest areas along interstate highways. Rest areas have rest rooms and picnic areas for use by travelers.

In addition to providing access to recreation facilities, many of our highways have high scenic value and provide a recreation value in themselves to the motorist. To increase the scenic value of our roads, the Commission is undertaking programs to control junkyards and billboards.

Department of Natural and Economic Resources 73-1.26

The Office of Water and Air Resources maintains a program of planning, regulation, and technical assistance to protect the streams and air of North Carolina. These activities contribute to outdoor recreation by preserving the natural attractiveness and healthy conditions of the State as well as by providing water quality in particular areas at a high enough level for fishing and swimming. Activities include planning, pollution control, estuarine protection, and aquatic plant control.

The Wildlife Resources Commission carries out regulation, enforcement, management, research, and education directed toward the conservation and enjoyment of wildlife resources. The Commission increases fishing opportunities by a program of fish

hatcheries, stocking and habitat improvement. Restocking and habitat improvement contribute to a larger game population. The Commission provides game lands for hunting and fishing. Research seeks knowledge of better ways to increase the supply of game and fish and to protect their habitat from environmental threats. Rules controlling the taking of fish and game are set and enforced to assure the maintenance of healthy populations. The Commission also enforces motor boat safety laws and carries out a boating safety program.

The Division of Commercial and Sports Fisheries has jurisdiction over marine fisheries. The Division has programs of research, regulation, and law enforcement to develop and protect the fisheries resource and to safeguard estuarine areas. The Division is preparing a comprehensive plan for the management of the estuaries and the coastal zone.

The Division of Commerce and Industry seeks to attract new businesses to North Carolina by technical assistance to both interested firms and to communities. Recreational developments are sought as well as other types of industry.

The Community Services Division provides planning and management services to local governments in North Carolina. Communities may obtain help in planning parks and other recreational facilities.

The National Park, Parkway and Forest Development Commission represents North Carolina interests in the management of federally owned land in western N. C. by making recommendations for the development and use of this land.

The Division of Travel and Promotion advertises North Carolina attractions to attract out-of-state visitors. This activity will increase the demand for outdoor recreation in North Carolina along with the demand for other services to vacationers. This Division also operates welcome centers along interstate highways. These centers distribute tourist information to travelers.

The Office of Forest Resources provides services to landowners to improve and protect their forest lands. The benefits include watershed and soil protection and wildlife habitat in addition to timber. Healthy, productive forest land provides a good environment for several forms of outdoor recreation, including hunting, fishing, and hiking. This office is planning to develop recreation areas in several State forests, as demonstration--recreation forests which will provide opportunities for all citizens, including the urban dweller, to become acquainted with their forest resources and the multiple-use concept in using our forest.

The State Parks Division manages seventeen State Parks and two natural areas amounting to 47,000 acres. The parks protect natural areas of outstanding scenic and scientific value, and provide opportunities for outdoor recreation in a natural setting.

The Federal Reservoirs Division develops and manages Federal reservoir shoreline lands, under lease from the U. S. Army Corps of Engineers, for outdoor recreation use. At present Kerr Reservoir is developed and managed for such use.

The Recreation Division provides technical assistance on recreation matters to all levels of government, private agencies and organizations having an interest in recreation and to commercial recreation enterprises. Also, this Division provides the staff work for the administration of the Land and Water Conservation Fund, and is responsible for developing and maintaining the Statewide Comprehensive Outdoor Recreation Plan.

Department of Human Resources — 73-1.27

The Office of Health Services adopts and enforces rules and regulations providing for the protection of public water supplies, including waters used for various outdoor recreation activities. Also, the Office provides technical assistance to the development and promotion of various standards for swimming pools.

The Office of Mental Health and the Office of Rehabilitative Services provide recreation services to their particular clientele group.

The Governor's Coordinating Council on Aging is not an agency created to provide direct services, but is a central coordinating and information center. The real job of the Council is an education one to assess the status of those over 65 and to determine the available needed services. The main purpose is to determine the existing problems, and then serve as a catalyst to encourage the development of programs to meet the needs and enrich the lives of older people. Leisure services and activities for the aging are among the areas of concern.

The Medicare-Medicaid Standards Section of the State Board of Health is responsible for certification surveys and resurveys under the Federal Medicare (Social Security Act, Title XVIII) and for the North Carolina Medicaid (Social Security Act, Title XIX) programs. One of the conditions of participation for Medicare facilities is patient activities, which includes recreation. The facilities are also required to provide multi-purpose areas for diversional and social activities.

Department of Social Rehabilitation and Control 73-1.28

This Department provides recreation services to its particular clientele group.

Department of Public Education 73-1.29

This Department provides recreation services to its particular clientele group and also assumes much of the responsibility for outdoor recreation education.

Multi-County Planning Regions 73-2.00

The multi-county planning regions are local governments joined together for comprehensive planning and development activities involving matters of mutual concern. Within each of the seventeen multi-county planning regions in North Carolina, Lead Regional Organizations (LRO) are being designated. These are legally created by general purpose local governments, and they will have several duties which are directly or indirectly related to outdoor recreation. These duties include:

1. Provide the necessary leadership for effective regional planning and program implementation;
2. Undertake the A-95 Clearinghouse function for the region;
3. Develop an Overall Program Design, a Regional Development Plan consistent with a Statewide Development Plan, and an annual work program to carry out these plans;
4. Develop a minimum budget and staff capability to fulfill these responsibilities; and,
5. Undertake planning activities for the entire region, regardless of membership make up.

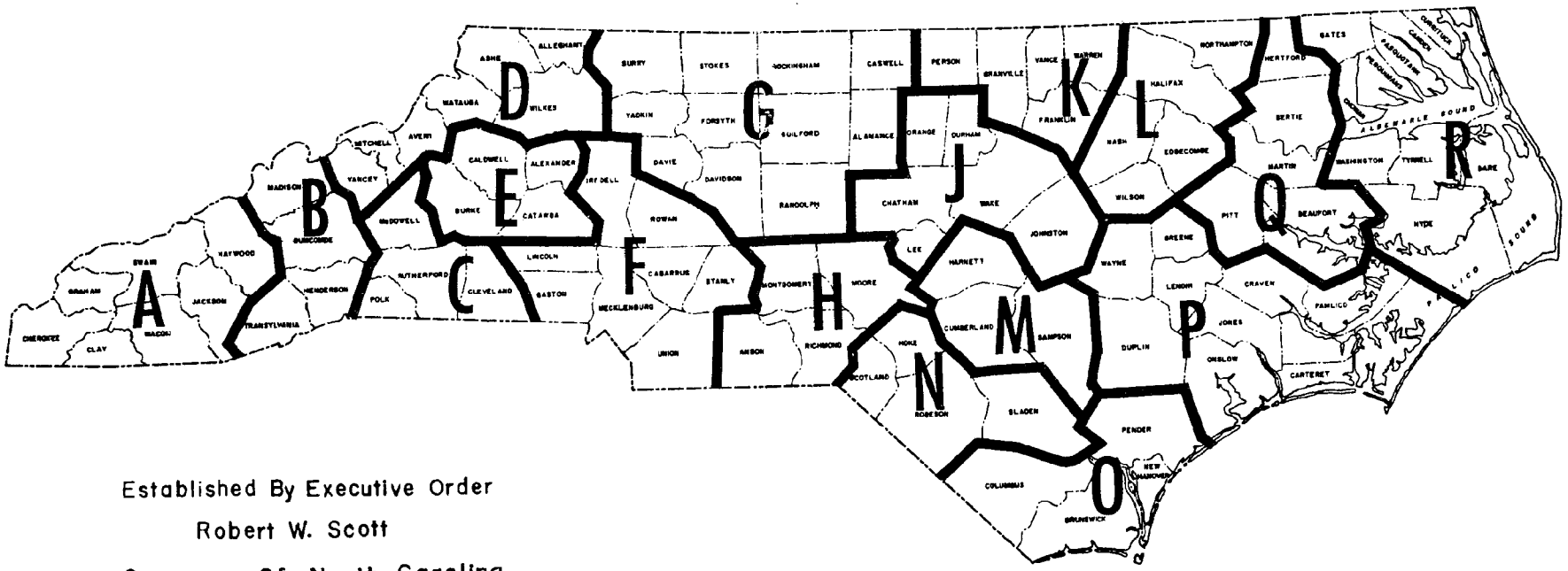
In keeping with these responsibilities, the Lead Regional Organizations are given the following prerogatives:

1. Any State funds which may be appropriated for general purpose comprehensive regional planning will be administered through the designated Lead Regional Organization;
2. All multi-jurisdictional planning and programs within the region, unless excepted by State or Federal law or policy, will be subject to the policy direction of the designated Lead Regional Organization; and,
3. Much of the basic data gathering and analysis to under gird each regional program will be provided by the State.

FIGURE VII. 1

(73-2.00)

NORTH CAROLINA MULTI-COUNTY PLANNING REGIONS



Established By Executive Order

Robert W. Scott

Governor Of North Carolina

May 7, 1970

The strongest function in which multi-county regional organizations are engaged is and has been planning and coordination at the multi-county level. A primary responsibility of such organizations is the preparation of comprehensive general plans. Such plans usually have region-wide recreation and open space plans as a functional component. In their overall role, regional organizations are capable of providing planning, coordination, and technical assitance to the public and private agencies within the region, and coordinating their plans and programs.

Local Government 73-3.00

In terms of existing outdoor recreation supply conditions in North Carolina, local governments are fulfilling the following roles:

1. The major suppliers of Class I outdoor recreation areas in terms of both number of sites (73.6% of the total) and total acreage (83.2% of total).
2. The providers of 17.1% of the total number of Class VI outdoor recreation sites and 5.2% of the total acreage in this class; 6% of the total number of Class II outdoor recreation sites and 9.6% of the acreage of this class; and a minor (0.5%) percentage of the Class III outdoor recreation sites in the State.
3. The operators of 30.9% of the total number of outdoor recreation sites and 1.4% of the total outdoor recreation acreage in the State.

Sixty-six (66) cities and towns in North Carolina provide full-time year-round recreation services for their citizens. The combined population of these cities and towns is 1,682,016. This constitutes 33.1% of North Carolina's total population and 73.6% of the urban population of the State. A breakdown of the size distribution of these 66 cities and towns is shown in Table VII-2.

TABLE VII-2

(73-3.00)

SIZE DISTRIBUTION OF MUNICIPALITIES PROVIDING
FULL-TIME RECREATION SERVICES

Population Range	Number of Cities & Towns in Category	Number of Cities & Towns With Full-Time Recreation Services	
		Number	Total Population
Over 25,000	17*	16	1,186,900
10,000-24,999	22	20	316,350
5,000- 9,999	31	19	140,350
2,500- 4,999	47	8	32,200
Under 2,500	--	3	5,622
	Totals	66	1,682,016

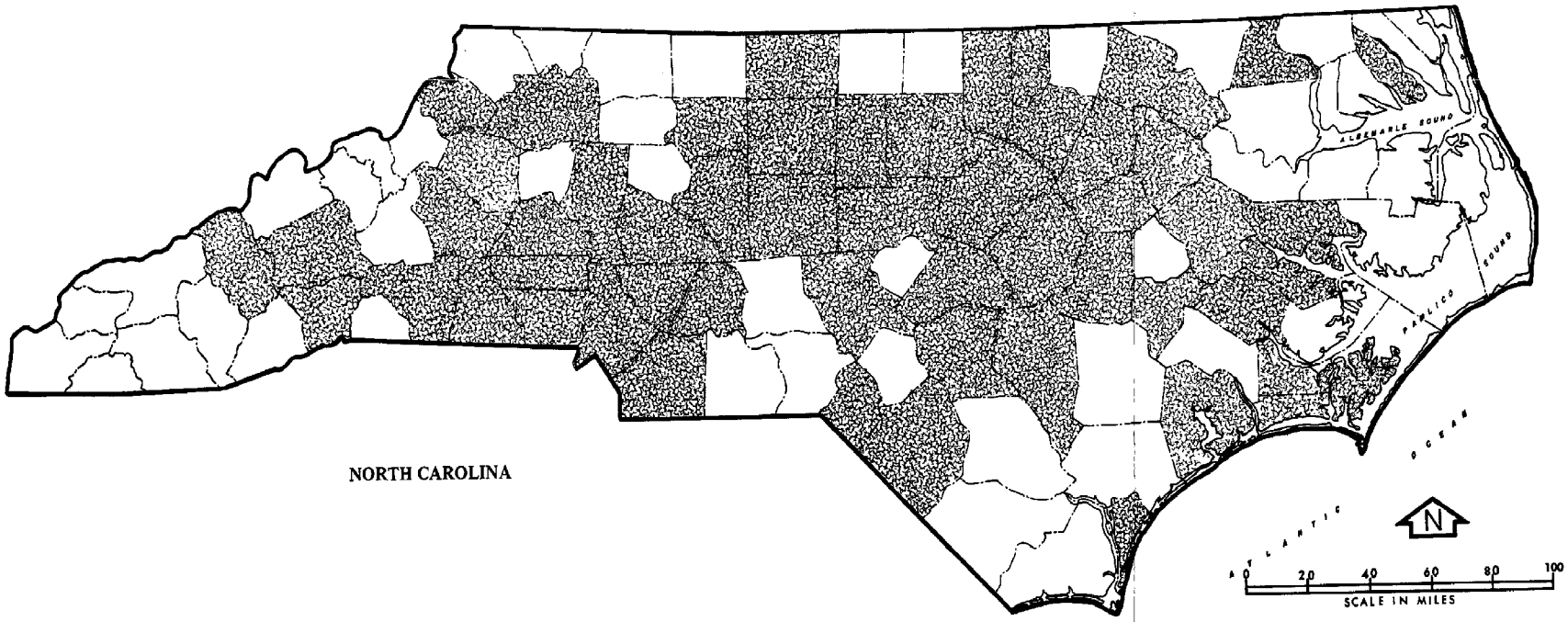
* One city in this category is not incorporated.

Of all incorporated cities and towns in the State with a population over 5,000, fourteen (14) do not have full-time recreation services; however, four, (Sanford, Roxboro, Havelock, Brevard) of these fourteen are in counties which provide recreation services on a county-wide basis.

Illustration VII-2 shows the location of counties in which one or more municipalities provide full-time recreation services.

In total, there are 147 cities and towns that have active public recreation programs--full-time, part-time or seasonal. These programs are conducted by a recreation commission, a recreation advisory committee or directly by the municipal governing boards. These recreation commissions and advisory committees have in excess of 1,100 laymen who volunteer the services to insure recreation opportunities for local citizens.

The recreation and park departments in the 66 cities with full-time recreation services are established by ordinance or charter, have annual operating budgets approved by the respective governing bodies and have full-time recreators to administer and supervise the recreation programs and services.



NORTH CAROLINA

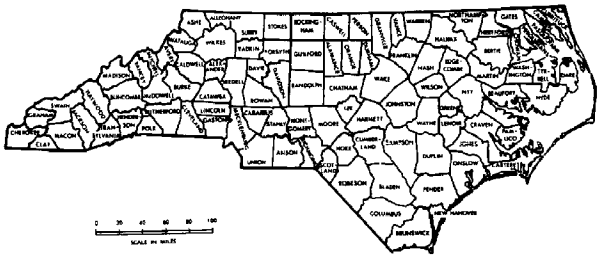


Figure VII.2
(73-3.00)

NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
COUNTIES SHOWING:

THOSE COUNTIES WITH ONE OR MORE FULL-TIME
MUNICIPAL RECREATION DEPARTMENTS

MUNICIPAL RECREATION DEPARTMENTS ARE IN SHADED AREA.

Local governments have assumed primary responsibility for the provision of recreation services. Counties and municipalities have traditionally provided outdoor recreation opportunities by acquiring, developing, and administering areas and facilities, and through planning and supervising programs.

Cities and towns have expended an increasing amount on planning, land acquisition, facilities and operating recreation and park programs. Local governmental authorities realize the growing importance of providing adequate public recreation facilities. Table VII-3 provides a summary of expenditures by cities and towns for recreation for the past eleven years. The present per capita spending of $9.45 is more than twice the figure of eleven years ago while the total expenditures are approaching a threefold increase.

The North Carolina General Statutes provide the enabling authority for municipalities to route tax funds into recreation, and for the creation of administrative units of organization. The role of local government is to acquire, develop, and maintain parks and to administer public recreation programs and services. Municipalities serve the needs of local neighborhoods, communities, and the city as a whole, while the role of the county is to serve the needs of a somewhat broader community.

Other public sectors, the private sector, and the commercial sector provide recreation services to municipal residents also. Therefore, it is important that municipalities be responsible for coordinating all of these services in order to obtain maximum benefits from the combined opportunities made available. Other local governmental units often receive technical and financial assistance from municipalities in their efforts to provide a full program of recreation services to the citizens. Also, municipalities often provide technical assistance to the private and commercial sectors in order to assure a full program of recreation services to citizens of the municipality.

TABLE VII-3

(73-3.00)

SUMMARY OF EXPENDITURES FOR RECREATION
BY
MUNICIPALITIES IN NORTH CAROLINA OFFERING
FULL-TIME, YEAR-ROUND RECREATION

Fiscal Year	No. Cities Reporting	Operating Budget			Capital Improvement Appropriation	Total
		Total	Per Capita	% Increase		
1972-73	63	$ 15,806,653	9.45	10.1 *	3,846,144	19,652,797
1971-72	51	13,853,517	8.58	6.5 *	4,818,518	18,672,035
1970-71	54	12,811,794	8.06	5.9 *	2,535,962	15,347,756
1969-70	53	10,869,947	7.61	13.6 *	4,255,118	15,125,065
1968-69	49	9,362,460	6.70	6.7 *	2,372,358	11,734,818
1967-68	46	8,547,917	6.28	15.0 *	1,569,423	10,144,340
1966-67	45	7,034,242	5.46	7.3 *	3,392,144	10,426,386
1965-66	48	7,092,844	5.09	6.3 *	1,491,332	8,584,176
1964-65	41	6,373,964	4.79	11.1 *	2,627,132	9,001,096
1963-64	41	5,853,964	4.31	3.6 *	1,179,279	7,033,243
1962-63	38	5,444,915	4.16		1,731,139	7,176,054
TOTALS	XXX	103,052,217	XXX	227.2 #	29,818,549	132,897,766
Average		9,368,383	6.41		2,710,777	12,081,615

* represents % increase from previous year

\# represents % increase in the 10-year period (1962-72)

Local governments perform a lawmaking function in the provision of recreation services to their citizens, such as the drafting of ordinances to enhance the provision of recreation services. Also, the function of education and research may be performed by local governments through the formal education program. These services consist primarily of the teaching of recreation activity skills, but may include instruction in recreation resources available and their proper use.

The county role in outdoor recreation is, like the municipal role, a large one. The number of counties providing recreation services, and the amount and variety of county recreation services being provided, are increasing.

County outdoor recreation opportunities are provided to all county citizens but are intended primarily for those who are not served by similar municipal services. Table VII-4 is a summary of county recreation expenditures. There are 40 counties presently making funds available for recreation, and the total expenditure is nearly one million dollars. When added to spending by cities and towns the total figure exceeds 20.5 million and provides some degree of formal public recreation program to more than 3.2 million people in the State.

Other public sectors, the private sector and the commercial sector can also provide a full program of recreation services to county residents. The role of coordination becomes important in such cases. Other local governmental units may benefit from technical and financial assistance provided by counties in the provision of a full program of recreation services. The private and commercial sectors may also benefit from technical assistance provided by the county. A county lawmaking function, like the municipal counterpart, is the drafting of county ordinances to enhance the provision of recreation services. Also like municipalities, counties provide outdoor recreation education and research through formal education for county citizens. Their services include instruction on recreation resources available, the proper use, and the teaching of recreation activity skills.

TABLE VII-4

(73-3.00)

COUNTY RECREATION EXPENDITURES

County	Population	Budget (1972-73)	Expenditure Per Capita
Mecklenburg	352,006	108,500	.31
Forsyth	207,880	15,000	.07
Cumberland	206,446	38,205	.19
Bumcombe	135,424	25,000	.18
Onslow	101,442	34,450	.34
Alamance	95,000	50,648	.53
Rowan	89,667	43,658	.49
Wayne	83,978	29,840	.36
New Hanover	80,718	27,532	.34
Cabarrus	73,750	12,500	.17
Craven	61,642	32,587	.53
Burke	57,398	16,300	.28
Lenoir	53,991	22,942	.42
Harnett	48,788	15,000	.31
Sampson	43,603	6,250	.14
Granville	32,227	1,000	.03
Lincoln	31,940	18,000	.56
Lee	30,240	181,900	6.02
Carteret	30,230	15,000	.50
Chatham	28,686	10,000	.35
McDowell	27,818	3,000	.11
Person	25,581	38,000	1.49
Yadkin	24,329	14,208	.58
Martin	24,050	21,000	.87
Stokes	23,204	15,687	.68
Watauga	22,860	16,800	.73
Brunswick	22,838	1,800	.08
Anson	21,313	26,000	1.22
Jackson	20,486	20,440	1.00
Ashe	18,768	10,500	.56
Alexander	18,599	11,000	.59
Transylvania	18,571	32,252	1.74
Hoke	16,246	6,000	.37
Cherokee	16,160	18,072	1.12
Macon	14,873	36,000	2.42
Washington	13,674	700	.05
Pamlico	8,790	2,500	.28
Alleghany	7,815	2,500	.32
Swain	7,525	8,500	1.13
Clay	5,032	2,000	.40
Total	2,203,588	991,271	.45

*Two of the above (Wayne and Lenoir) contribute funds to cities for recreation.

Chapter VII	72-3.20 thru
Plan Formulation	72-3.30

Coordination of Public, Private and Commercial Programs 72-3.20

In order that public funds be used efficiently, it is an objective of the State that all levels of government work cooperatively and without duplication to meet identified outdoor recreation needs. To this end, the results of the Outdoor Recreation Planning Program will be used as a basis for evaluating, assigning priorities, and endorsing projects of Federal, State, and local government. Furthermore, it is an objective of the State that the outdoor recreation efforts of the private and commercial sectors be coordinated both among themselves and with the public sector.

Provision of Technical and Advisory Services 72-3.30

It is an objective of the State to provide technical and advisory services relating to design and execution of outdoor recreation projects and programs within the State by all levels of government and by the private and commercial sectors.

Federal 73-4.00

In terms of existing outdoor recreation supply conditions in North Carolina, the Federal Government is fulfilling the following outdoor recreation roles:

1. The only supplier of Class V outdoor recreation areas, as defined by the National Wilderness Act. The total acreage in the two wilderness areas in the State is 20,915 acres. As of January 1970 these were the only designated wilderness areas in the eastern part of the United States according to A Handbook on the Wilderness Act.

2. Sharing top place with the private sector as a supplier of Class IV outdoor recreation sites in terms of number of sites (37.5% of total) and holding top place for this Class in terms of total acreage (77.4% of total).

3. The supplier of the greatest number of acres in Class III outdoor recreation sites, although the private sector operates the greatest number of sites in this category. The federally operated acreage in this category (1,490,866) accounts for 78% of all Class III acreage in the State (1,910,863 acres).

4. The operator of a small percentage of the total number of Class II and Class VI sites. However, a significant percentage (29.3%) of the total acreage in Class VI sites is under Federal operation. No Class I outdoor recreation sites are under Federal operation.

5. The operator of 5.1% of the total number of outdoor recreation sites in the State. In terms of acreage, the Federal Government operates 69.8% of the total outdoor recreation acreage in the State (2,192,635 acres), making it the major supplier in terms of acreage.

Department of Agriculture 73-4.10

Within the Department of Agriculture there are a number of agencies with outdoor recreation roles. The Agriculture Research Service provides research, technical, and advisory services for a wide range of subjects indirectly related to outdoor recreation and for planning of recreation structures. This agency's services are also available for those interested in resource management and conservation, and the services of this agency are available to the public in general.

The Agricultural Stabilization and Conservation Service and the Cooperative State Research Service provide financial assistance for resource management and conservation. The Farmers' Home Administration provides technical and financial assistance for certain types of public and private recreation areas to small towns (not over 5,500 population) and nonprofit rural groups associated with small towns and rural communities. The Federal Extension Service provides technical assistance for design, development, and landscaping to State and local governments, nonprofit agencies, and private organizations. Program activities of this agency include farm, vocation businesses, recreation leadership training, and development.

The National Forests under the administration of the U. S. Forest Service are enjoyed by many of our citizens and visitors. Also, the Forest Service provides financial assistance to states for reforestation. Services available to individuals, industries, organizations, and agencies (when the states have no such comparable assistance) for recreation as a use of forests include education, research, technical assistance and the distribution of publications. The Forest Service conducts research (basic and applied) related to forestry and including outdoor recreation.

The Soil Conservation Service, in providing technical and financial assistance to small watershed, Resource Conservation and Development, and other programs provides acquisition, development, and planning services to water-related recreation areas in cooperation with local sponsoring organizations.

Chapter VII	73-4.20 thru
Plan Formulation	73-4.30

Department of Commerce 73-4.20

Within the Department of Commerce three agencies have some form of outdoor recreation role. The Bureau of the Census provides planning data for recreation planners. The Censuses and subsequent publication of results are the products of extensive education, research, and technical assistance activities. The Business and Defense Services Administration contributes technical and advisory services in the establishment and operation of recreation enterprises for investors and businessmen. The Economic Development Administration provides certain acquisition, development, technical, and financial assistance services for certain types of recreation areas to state and local governments and nonprofit organizations.

Department of Defense 73-4.30

The Department of Defense has two distinct outdoor recreation roles. First, the Army Corps of Engineers provides a wide range of outdoor recreation services to state and local governments through a wide range of programs. The services include the acquisition and development of outdoor recreation areas and facilities. Other services include planning, coordination, education and research, and technical and financial assistance. Their programs include civil works, flood control and water resources projects, beach protection and stabilization, navigation and small harbors improvements. Resources for recreation developed by the various activities and programs of the Corps are subject to the requirements of the Federal Water Projects Recreation Act. The second outdoor recreation role of the Department of Defense is providing outdoor recreation opportunities to personnel at military installations. These services include acquisition, development, and administration of various Class I and Class II sites for military personnel and their dependents stationed at such installations.

Department of Health, Education and Welfare 73-4.40

The Department of Health, Education and Welfare contains several agencies which have rather extensive outdoor recreation roles. The Administration on Aging provides both financial and technical assistance under the Older Americans Act to State governmental agencies, local governments, and nonprofit organizations. Included are such projects as purchase and construction of recreation equipment, facility alteration and repair, and the provision of salaries for personnel involved in planning, supervising and conducting programs.

The Office of Education, Bureau of Elementary and Secondary Education provides financial assistance under Public Law 81-815 and Public Law 81-874 and the Elementary and Secondary Education Act of 1965 to local education agencies. Recreation resources provided under these two public laws include personnel, technical services and development of recreation facilities on school property. The 1965 Act provides for recreation programs and projects for the educationally deprived; development of recreation facilities; salaries for personnel involved in planning, supervising, and conducting programs; outside consultants for certain services in connection with approved projects; education and training of employees serving in an approved project; and purchase or construction of recreation equipment as part of an approved project.

The Office of Education, Bureau of Adult and Vocational Education provides training and education under the Manpower Development and Training Act, administered jointly with the Department of Labor, for recreation and park occupations at the subprofessional level. Such occupations include recreation aids, janitors, gardners, maintenance men, and carpenters. The Public Health Service provides technical assistance, information, and statistics through State programs to public agencies and private groups for health and sanitation aspects of the recreation environment, the prevention of accidents associated with recreation, and standards and training.

The Vocational Rehabilitation Administration provides financial assistance to states and other public and nonprofit organizations under their vocational rehabilitation for the disabled program. This program includes provisions for support and improvement of vocational rehabilitation services, research, and professional education. The Welfare Administration, Children's Bureau provides financial assitance to institutions of higher learning for training personnel. The Office of Juvenile Delinquency and Youth Development provides financial assistance to state and local governments and other nonprofit organizations for demonstration projects, inservice training, research and institutes or conferences for demonstrating or developing techniques and practices leading to the solution of juvenile delinquency control problems.

Department of Housing and Urban Development 73-4.50

Within the Department of Housing and Urban Development there are a number of agencies with outdoor recreation roles. The Federal Housing Administration provides financial assistance to two programs which contribute recreation resources. First, the Advance Acquisition of Land Grant Program is available to any public body with authority to acquire and finance land for future construction of public facilities which contribute to the economy, efficiency and the comprehensively planned development of an area. Secondly, mortgages are insured under the National Housing Act for assisting families to become homeowners, the value of which may include certain outdoor recreation facilities. The Housing Assistance Administration provides financial assistance through the Elderly Housing Loan Program. Housing projects constructed with assistance from this program may include space for outdoor recreation. Also, acquisition, development, and personnel salaries for various recreation programs can be provided under the Low-Rent Housing Program through local Housing Authorities.

The Urban Planning Assistance agency provides financial assistance to state and local governments through section 701 of the National Housing Act of 1949, as amended, in the form of grants for planning. The Office of Metropolitan Development provides financial assistance to state and local governments under section 702 of the Act cited above in the form of advances for public works planning. The Office of Urban Neighborhood Services provides financial assistance to local public bodies under the Neighborhood Facilities Program for the development of multi-purpose neighborhood centers, acquisition of small park areas in conjunction with neighborhood centers, and permanently affixed equipment for centers.

Under the Demonstration Cities and Metropolitan Development Act the Model Cities Administration provides financial and technical assistance to states and local units of government to plan, develop and carry out comprehensive city development programs, including acquisition and development of recreational and cultural lands and facilities and historic preservation. The Open Space Land and Urban Beautification and Improvement Programs provide financial and technical assistance to state and local governments or acquisition and development of land for recreation use, conservation or historic and scenic purposes and for beautification.

The Public Facilities Program provides financial assistance to local units of government in the form of loans for acquisition and development of public facilities which may in some cases include recreation. The Renewal Assistance Administration provides financial assistance to local public agencies through the Urban Renewal program for land acquisition in renewal project areas for recreation-associated purposes and for the development of certain recreation-associated facilities.

Department of the Interior 73-4.60

The Department of the Interior performs its outdoor recreation role through several of its agencies. Through the Land and Water Conservation Fund Program the Bureau of Outdoor Recreation provides planning, financial, and technical assistance to state and local governments for acquisition and development of land for various outdoor recreation purposes. The Bureau also helps to fund statewide comprehensive outdoor recreation plans, and it is responsible for the Nationwide Outdoor Recreation Plan.

The Bureau of Sport Fisheries and Wildlife provides services to state fish and game departments through Federal Aid in Fish and Wildlife Restoration programs for restoration, conservation, and management of fish and wildlife resources. Activities included in this program are acquisition of land, development of certain recreation related facilities, planning, design, construction, and maintenance. The Division of Fishery Services provides technical assistance to the National Park Service for developing and conducting management programs related to sport fishery resources.

The National Park Service administers several significant outdoor recreation programs. The first is the National Park System in which areas are acquired, developed and administered for outdoor recreation use. Second, financial assistance is provided to states under the Historic Preservation Act for comprehensive historic surveys and plans; acquisition, preservation, and development of historic properties by state and local governments; and expansion and acceleration of historic preservation programs and activities. The National Trust for Historic Preservation in the United States is also eligible for grants under the Historic Preservation Act. Third, the National Park Service provides advisory services, makes recommendations and provides coordination to the President and the Congress through the Council on Historic Preservation for matters relating to historic preservation. Lastly, through the State Assistance Program to state and local governments, technical assistance usually programmed and reimbursable, is made available for park agency organization and administration, planning, programming and research.

The Office of Water Resources Research provides financial assistance to states under the Water Resources Research Act of 1964 for water resources research, including recreation as a use of water resources. The U. S. Geological Survey provides technical assistance to states, local governments, and nonprofit organizations. Their programs include surveys, investigations and research programs for topographic, geologic, and hydrologic mapping, inventory of water resources; research in topography, geochemistry, hydrology, geology, geophysics and related sciences; and map and report publication.

Department of Labor — 73-4.70

The Department of Labor contains two agencies with outdoor recreation roles. The Bureau of Employment Security of the Manpower Administration provides technical and advisory assistance to park and recreation workers and employees through the Employment Service and Manpower Development and Training Act for counseling, placement, recruitment, and testing of personnel. The Bureau of Work Programs of the Manpower Administration provides financial assistance to disadvantaged youths, local governmental agencies, and public and private nonprofit organizations through the Neighborhood Youth Corps for employment for disadvantage youth and for in-service training.

Department of Transportation — 73-4.80

The Department of Transportation, Bureau of Public Roads provides financial assistance to state and local governments under the Highway Beautification Act of 1965 for acquisition and development of land for recreation use in conjunction with highways. This agency also provides policy direction to state and local governments under the Highway Act of 1966 concerning highway encroachment on park lands.

Independent Federal Agencies 73-4.90

The Federal Power Commission provides regulation, technical assistance, and coordination to private power companies through the commissions function of hydroelectric project licensing. Regulations require that recreation use be provided for at private power company hydroelectric projects.

The General Services Administration facilitates the transfer of federal real property to states and local governments, including real property of historic, recreation, or wildlife conservation value.

The National Foundation on the Arts and Humanities develops and promotes national policy under the National Foundation on the Arts and Humanities Act of 1965. The National Endowment for the Arts provides financial assistance to states and other public bodies and individuals and nonprofit groups for furthering cultural projects under the Act of 1965 cited above.

The President's Council on Physical Fitness provides technical and advisory assistance to public and private organizations for physical fitness programming, research, and public relations.

The Small Business Administration provides financial assistance to small business firms in the form of loans for recreational and amusement facilities which contribute to the health and well being of the public.

The Smithsonian Institution provides technical assistance to individuals and organizations for a variety of recreation-related purposes including observatories, museums, art galleries, zoos, and exhibitions. Such assistance includes: program planning, construction, training of specialists and technicians, staffing patterns, collection management, research, information retrieval, and conservation of museum and art objects.

The Tennessee Valley Authority provides for the acquisition and development of outdoor recreation areas. Also, TVA provides education, planning, and technical assistance to state and local agencies and private organizations through its recreation resources development programs for reservoir lands with identified recreation potential.

The U. S. Coast Guard provides law enforcement, warning, search and rescue, literature and lecture services as needed or requested for recreational boating.

The Water Resources Council provides financial assistance, plan review and policy implementation services to federal and state agencies, local governments, and private concerns under the Water Resources Planning Act of 1965 for conservation, development, and utilization of water and related land resources.

Private and Commercial 73-6.00

In terms of present supply conditions in North Carolina, the private and commercial sectors are fulfilling the roles of:

1. The major suppliers of Class II opportunities in terms of both number of sites (84% of total) and number of acres (86.8% of total).

2. The major suppliers of Class III opportunities in terms of number of sites (44% of total).

3. Sharing with the Federal Government the role of major suppliers of Class IV opportunities in terms of number of sites (37.5% of total).

4. The suppliers of, in descending order of magnitude (in terms of number of sites and number of acres), Class I and Class VI opportunities.

5. The operators of 58.5% of the total number of outdoor recreation sites in the State. These sites make up 21.4% of the total outdoor recreation acreage.

6. The majority of private and commercial outdoor recreation opportunities, both in terms of number of sites and total acreage, are provided by the private (nonprofit) sector, as opposed to the commercial sector, as indicated in the following table.

TABLE VII-5

(73-6.00)

OUTDOOR RECREATION SITES AND ACRES
ADMINISTERED BY COMMERCIAL AND
PRIVATE SECTORS

Site Class	Commercial		Private	
	Sites	Acres	Sites	Acres
I	11	91	235	1,540
II	596	77,163	539	120,650
III	24	15,742	64	252,467
IV	2	113	1	251
V				
VI	2	65	6	47
Totals	635	93,174	845	374,955

Chapter VII	73-6.00 thru
Plan Formulation	73-6.20

Voluntary, nonprofit groups, and commercial enterprises have historically had a large role in providing recreation areas, facilities, and services and are thus a tremendous force in the recreation movement.

Private, Nonprofit 73-6.10

The private agencies (United Fund, religious, industries, clubs) usually provide a particular type of recreation experience for a select segment of the population. Typical programs found within a private agency usually are adapted primarily to boys (YMCA, Boy's Clubs), girls (Girls Scouts, YWCA), specific church members, employees of one industrial firm, and special interest groups (i.e. tennis or swimming). This role is important in meeting the objectives of outdoor recreation in North Carolina.

Commercial 73-6.20

The role of commercial recreation is to provide quality outdoor recreation opportunities while yielding a reasonable return on investment. It is anticipated that commercial investors will acquire and develop additional resorts, i.e., ski resorts, vacation homes, seaside resorts and comparable high cost areas. In addition, the commercial sector is anticipated to increase its role in providing camping areas, golf courses, swimming pools, fishing lakes, hunting preserves, and marinas. The major impact of the commercial sector in terms of supplying areas and facilities lies, then, in the provision of specialized outdoor recreation areas (SORA).

Commercial recreation, properly regulated and of a positive influence, has a legitimate and important place in helping to satisfy the leisure demands and interests of the public.

Problems and Opportunities 74-0.00

By a careful identification of problems in the context of policies, roles, objectives and trends, specific goals can be developed in terms of specific desired accomplishments. From the formulation of goals an action program can be developed. This section will address itself to many areas of concern that confront the delivery of outdoor recreation opportunities in North Carolina. These problems are recognized as but one side of the coin--the other side being the opportunities for action programs geared to solving the problem.

Inadequate Land Use Controls 74-1.00

Presently, one of the most serious problems affecting the outdoor recreation opportunities in North Carolina, and the Nation as well, is the continuing depoliation and exploitation of vital natural areas by inadequate controls of land development. Every day, more resources such as wetlands, forests, estuaries, beaches and mountain slopes are transformed into sites for residential or business activities with little consideration for the effects of such actions on the long-term productivity or use of the land. Land is the basic resource upon which the majority of recreation activities depend. Many current development practices preclude the use of land for recreation purposes. In other cases, mitigation for damage to recreation lands or potential recreation lands is inadequate or absent.

The lack of discretion in the use of land, of course, has been a common practice throughout most of our history in America. In fact, when the nation expanded from its original thirteen states through a succession of large land purchases, it was necessary to encourage with whatever inducement possible the conversion of virgin lands into productive uses. In recent years,

however, we have come to realize that, if land is used abusively, the result will be environmental damage and economic loss to both the owner and the greater public. From the public point of view, therefore, proper use of land is of direct concern to the general health, safety and welfare of the community at large.

There are large areas of land in the State dedicated to recreation use. Considering all types of sites there are more than two million acres. Fortunately, there are only minor examples of damage to the quality of the resources. But care must be exercised to make certain this record is continued. There must be wise design of facilities and areas, careful control of construction, prudent treatment of the land area and regulation of use to achieve quality recreation areas.

The future development of recreation lands in North Carolina must reflect well thought-out goals and priorities and must be guided by a rational land use policy. In North Carolina, as in most other states, the role of public guidance for land use has traditionally been entrusted by the State to the local governments through enabling legislation for planning. As a rule, such enabling legislation does not make it mandatory for a local government to institute any control or protective measures on the land. Furthermore, it usually does not contain any specific standards regarding the development of land. Therefore, if a local government chooses to exercise the option of guiding land development, the role is sometimes minimal. In the case of two or more local governments with active land planning and control activities in the same region, their policies and practices are frequently contradictory and confusing to the citizenry.

Lack of Sufficient Financial Support 74-2.00

The future progress of outdoor recreation in North Carolina is dependent on finding ways to provide adequate funds for acquisition, development and management of recreation areas and services. This problem necessitates a reasonable level of funding, proper timing and the coordination of planning and expenditures.

The State Park System was started based on local interest that developed around a gift of land. To date this approach has provided 84% of the present State Park acreage. This method alone can no longer provide the State with a park system of proper size and location to be accessible to the general public. In addition to carrying out a reasonable acquisition program, funds must be made available to carry out the required development. Both types of funding have been lacking to the extent that North Carolina ranks last in relation to other states in terms of State Park acreage per capita. The total spending for State Park acquisition and development for the last 57 years has amounted to about 7.5 million dollars.

At the same time, local government has made rapid progress toward the organization of programs and administrative vehicles to handle local needs. There is now a Recreation Department or Commission in all but one of the incorporated cities in the State with a population in excess of 7,500. As of January, 1973, twenty counties had Recreation Departments actively operating in addition to the municipal departments. These organizations are making progress toward satisfying recreation needs. For the fiscal year ending June 30, 1973, municipalities in North Carolina budgeted in excess of twenty million dollars for recreation (see Table VII-3). Requests since June 30, 1971 for Land and Water Conservation Fund grants have exceeded the funds available. The question arises as to how many projects, based on recognized need, are cancelled because it is known that funds will not be forthcoming or how often project needs are discarded due to lack of funds at the time land resources are available. The need for local recreation funding is large and expanding.

There are similar situations involving the preservation of historic/cultural sites. Needed acquisition and development projects in the area of wildlife resources are also restricted by lack of funding. Many of the accomplishments in this area have also resulted from gifts and donations.

The timing in the availability of funds can be a complex problem. When Federal, State and local funds are all involved, the complexity is multiplied, but the means of overcoming these problems is available if the level of funding is adequate. So the starting point of overcoming the major problems of carrying out an aggressive outdoor recreation program is to achieve a more reasonable level of funding from all sources; Federal, State, local, private and commercial.

Inequitable Distribution of Outdoor Recreation Opportunities

The outdoor recreation needs, in terms of areas and facilities, are identified in Chapter VI. As that chapter indicates, some sections of the State are deficient in outdoor recreation areas. Other sections of the State have no deficiencies in terms of gross acreage in some site classes. However, all sections of the State have cases of inequitable distribution of outdoor recreation sites. This problem is especially evident for large urban areas. There are no cases where a full spectrum of outdoor recreation opportunities is available in close proximity to a large urban population. This is true by definition in the case of Class V sites. The criteria for Class V sites require that they be located at some distance from large concentrations of people. Therefore, it is unreasonable to expect to achieve an equitable distribution of Class V sites in terms of proximity to large urban populations. Classes IV and VI are similar in that the criteria for defining them are based on the nature of the natural or historic resource and not on their proximity to population concentrations.

There are many instances where Class I, II, and III sites are distributed in a disproportional manner to population concentrations. Such inequities can be corrected because the criteria for defining these sites makes their location more amenable to manipulation.

Another inequity in the distribution of outdoor recreation opportunities is the disproportional sharing of the total responsibility among various types of operators. It is apparent from the discussion on roles that the State has not assumed its proper share of this responsibility. A greater quantity and variety of State administered outdoor recreation areas, facilities and programs is needed. The traditional North Carolina state park with emphasis on preservation of natural features must be maintained, and the number of parks in this system needs to be expanded. However, this system must be supplemented with additional types of operations.

Another inequity in the distribution of outdoor recreation opportunities is the additional burden--or impossibility--of access which the handicapped person often encounters at outdoor recreation sites and in the programs and activities taking place thereon. The design of buildings and structures often precludes their use by persons in wheelchairs. Nature trails and flower gardens usually are built and maintained in such a way that only the ambulatory and sighted can use them.

A final aspect of the inequities in the distribution of outdoor recreation opportunities has to do with the optimum use of existing and potential recreation resources without degradation or damage. Some outdoor recreation resources are being used to the limit of their capacity. Others are being used beyond their apparent capacity. Still others are not being used to their optimum capacity. Such inconsistencies in management and use can cause too disproportional a share of the load to be carried by our most fragile and scarce outdoor recreation resources.

Less Than Optimum Effectiveness and Efficiency in the Administration of State Outdoor Recreation Services — 74-4.00

Technical assistance for outdoor recreation has been provided by the State since 1945. One of the most important factors determining the success of any such program is the efficiency and scope of its information system. There is a continuing need to

update data and information of concern to outdoor recreation interests in the State. In addition to updated information being available, it must be readily accessible to all who seek and need it. The various bulletins, studies, reports and publications which are a part of the State's technical assistance program must continually be evaluated as to their effectiveness. Also, the technical assistance staff must be continually improved through various types of education and training programs in order to remain effective and efficient in the performance of their duties. In short, the problem is the continual improvement of the quality, quantity and variety of technical assistance services for outdoor recreation administered by the State.

The State is getting less than optimum effectiveness and efficiency in the administration of outdoor recreation services because of the fragmentation of outdoor recreation planning, Land and Water Conservation Fund Project administration, and outdoor recreation project implementation in State Government. There is a need to bring about realistic coordination and provide the means to bring all outdoor recreation activities of the State into a common thrust resulting in an aggressive outdoor recreation program.

The participation by, and coordination with, all persons concerned in the planning, development, and administration of recreation opportunities and services in the State is a continuing need. Such participation and coordination will necessarily involve all operator classes--Federal, State, local, private and commercial--and their clientele in addition to experts from other disciplines.

Finally, optimum effectiveness and efficiency in the administration of State outdoor recreation services requires that an up-to-date assessment of the facility and program needs for all phases and sectors of outdoor recreation be maintained. Such an assessment would include the outdoor recreation needs of special populations; the needs or potentials for preservation of unique

natural areas; the broad needs for all classes of outdoor recreation sites on a regional and, to the extent practical, a county basis; the continuing evaluation of priorities of outdoor recreation needs by both site class and service area; the unique needs of large urban populations; the needs and potentials for linear park areas and facilities such as trails, natural rivers, and scenic highways, and the needs for water reservoirs.

State Policy Formulation and Implications for Other Sectors — 75-1.00

Introduction

In developing guidelines for State policy and the implications of these for other sectors (i.e. Federal, multi-county region, local and private) some form of categorization of the subject matter was felt needed. Realizing that no system would provide a clear and mutually exclusive breakdown, it was decided to place these guidelines for policy directives into categories that would indicate the primary type of action to which they are related.

Policy Formulation for State Action Programs — 75-2.00

The following policy guidelines are intended to supplement established policies such as those contained in State Parks Principles and Natural Areas Principles published by the State Parks Division and Laws Pertaining to the Activities and Functions of the State Department of Archives and History and "Criteria for the Selection and Acquisition of Historic Properties for State Ownership and for State Aid to Local Historic Site Projects" published by the Department of Art, Culture and History.

Land Use Policy Planning and Implementation — 75-2.10

Experts and professionals in land use now generally agree that a reform in public guidance of land development will come about only with a stronger State role. Currently, efforts for developing a new State policy framework for dealing with the challenges as well as problems of land use in North Carolina are already underway. The Office of State Planning of the

Department of Administration, in its November 1972 report entitled "A Land Policy for North Carolina", outlined eight major elements for a proposed State land policy framework.

1. A statewide land classification system

   A state land policy cannot be implemented without a land classification system. Such a system would provide a basic structure from which all land use regulatory measures would emanate. Four categories of land are now envisioned--conservation lands; productive lands including agriculture, mining, etc. developing urban areas; and urban areas.

2. Tax policy adjustments corresponding to the classification system

   Many objectives of state land policy can be achieved by properly constructed and logically supported regulation in the public interest. The statewide classification system will place limitations on the level of development and the availability of services. It is essential that a tax program be constructed which will take account of the land use categories and adjust the tax burden accordingly, including support to local government for tax revenues which would be lost by them in such a classification system.

3. A statewide development policy

   Development policies and investment guidelines have been used by the State of North Carolina in the programs of the Appalachian Regional Commission and the Coastal Plains Regional Commission. These basic approaches are being incorporated into a single Statewide Development Policy. All aspects of the Statewide Development Policy have direct application in almost all phases of the statewide land policy framework.

Public services requiring substantial investment of public funds are related to the land classification system. The actual installation of such public services should receive high priority in designated areas of the State and will not be available in those not identified for development.

4. Public land management standards

Local governments and their numerous affiliates as well as all State Government agencies, buy, sell and manage substantial amounts of land. Consistent policy in the acquisition, management, and disposition of public lands by all governmental units will assure better use of both land and financial resources and will offer a means for achieving important policy objectives.

5. Plan and management program--critical areas

Special plan and management programs for critical areas should continue to be accelerated in advance of the development of a more comprehensive land policy.

There is need for State involvement in a program to assist local units of government in coping with problems where solutions are expensive and complex. The scale of the critical areas is envisioned as an areawide impact embracing several counties and many municipalities. The burden of coordination and financing solutions is often great for the smaller units of government.

6. Regional public land agency

The locally controlled regional councils of government should be provided technical assistance in developing the capabilities to serve as regional public land agencies, if the member governments agree that such a capability is desirable.

A regional public land agency may offer a "best" vantage point for the management of much of this land--local control with a multi-county perspective could provide a greater scale of management services and capability in directing land to its best use.

7. A-95 review and clearinghouse system

The State of North Carolina has instituted its project notification and review system at the State and regional level. Applications for Federal grants covered by the A-95 Circular are reviewed by the Lead Regional Organizations and State agencies.

As work continues on the land policy framework, the review clearinghouse system will be able to test proposed projects against the stated intent of the land policy. This will add a significant focus and impact to the reviews which, at this time, cannot address the major land-based issues of any project.

8. Statewide goals and policies

The statewide land policy will be submitted to the North Carolina Council on State Goals and Policy. The enabling legislation which established the Council endowed it with broad and comprehensive powers and duties. One of its primary functions is to express the needs of North Carolina's citizens and to identify goals for State action that will help meet those needs and aspirations. The Council has the power to recommend policies to guide the State in achieving these goals.

Within the land policy framework as described above, adequate public land development guidance can be administered at either the State or the local level as appropriate. As the State outdoor recreation plan would inevitably affect the allocation and development of land resources, there must be a concerted effort to establish a close relationship between the recreation and land policy planning processes. In fact, the specific needs of the former must be clearly recognized by the latter. Likewise, the implementation of the statewide comprehensive outdoor recreation plan must be in accord with the context of an overall land policy.

In implementing the State Outdoor Recreation Plan, it is important recognize that planning as a governmental function has been carried out traditionally by an assortment of fragmentary public instutions and agencies created to perform specific purposes. It is rather common to see that, in many political jurisdictions of the State, such public facilities as roads, parks, etc., are often developed to perpetuate the imbalance of the locations of people and jobs already in existence. To remedy this situation concerted efforts must be made that will help to adjust the current imbalance in the growth and distribution pattern of our human and natural resources. It should also be recognized that the State Government alone cannot hope to make the planning process effective for the State Outdoor Recreation Plan. The role of the local governments and regional agencies must be clearly defined and established to ensure that the plan would respond to the recreation needs unique to each and every region of the State. Furthermore, specific measures must be made available to facilitate adequate management and administrative linkages with other relevant functional planning activities of the government.

Acquisition, Development and Administration of Areas and Facilities — 75-2.20

As a supplier of recreation areas and facilities, the State should acquire, develop, manage and maintain recreation resources for any and all sections of the State where State operated areas

now exist and where such areas and facilities are indicated as being needed by the people according to the State Comprehensive Outdoor Recreation Plan. More specifically, the State should:

1. Acquire, preserve, and protect notable existing features which have widespread public interest and recreation value because of special scenic, historic, and/or scientific characteristics.

2. Cooperate with the other states and the Federal Government in the acquisition, development, and management of recreation resources having both statewide and interstate or national significance.

3. Provide a variety of recreation opportunities for all population groups recognizing the important human values of the many activities which comprise the field of recreation in its broadest range.

4. Provide adequate financing through taxation, bond issues, user fees and other appropriate means such as grants-in-aid, gifts, and contributions.

5. Increase recreation opportunities commensurate with the growth of needs through acquisition of adequate lands for purposes such as: scenic roads, facilities for camping, picnicking and lodging, trails for horseback riding, hiking and bicycling, water facilities of all types, cultural activities such as fairs, festivals, dramas, music, dance, arts and sports.

6. Formally consult local governments, from the inception of the planning process, before acquiring lands or withdrawing lands from tax roles, and reimbursing local governments for lost revenue when land is removed from taxation.

7. Have sufficient land adjacent to State-owned lakes to assure public access to such bodies of water.

8. Assure public access to rivers, sounds and the Atlantic Ocean by acquiring needed public access areas.

9. Use easements and other techniques to secure the public benefits of open space at less than the cost of acquiring full title to such areas wherever these techniques appear to be feasible.

10. Expand State controlled parks and recreation areas and facilities as needed.

11. Manage its recreation resources in such a way that they provide for the maximum recreation enjoyment for the greatest number of people within the constraints of the resouce capability. The management and utilization of resources should include controls and use limitations of suitable means to assure that the resources are not destroyed or degraded. To this end, nonrenewable resources should be preserved to the extent that present and future use does not degrade the quality of the resource. It should be the goal of management to upgrade the quality standards of these renewable resources whenever feasible under the concept of multi-use management.

12. Recognize historic/cultural sites as an important facet of the outdoor recreation program. Whatever the present major thrust, there must be consideration beyond economic benefit accruing from attracting visitors to an historic/cultural site. The values of constructive use of leisure time and the educational values obtained by study of our past must be balanced against the tourism benefit. Preservation benefits that are in addition to, or beyond, outdoor recreation, must receive strong consideration.

North Carolina was deeply involved in the early settlement and development of the country. This has resulted in large numbers of historic and cultural sites that need active preservation and restoration programs. It is in the best interest of the State Outdoor Recreation Program to encourage and support the preservation and restoration programs of the Office of Archives and History.

Administration of Programs, Services Regulations and Controls — 75-2.30

In the administration of recreation and recreation-related programs, the State should:

1. Insure the delivery of recreation services to the underprivileged and other "special populations" on a level equal to that of the general citizenry.

2. Emphasize a wider variety of recreation opportunities for urban residents.

3. Make certain that sufficient adjacent land acreage is acquired, developed, and administered for public access to all water resource development projects.

4. Protect and enhance the scenic and recreational values of existing and proposed roads with tools and programs now available.

Coordination — 75-2.40

The State, as the focal point for coordinating the major outdoor recreation efforts in the State should:

1. Provide the leadership in determining what types of recreation opportunities should be offered by what sector (public or private) and, if public, what level of government (Federal, State, local).

2. Coordinate outdoor recreation efforts of various State agencies in order to attain maximum efficiency and effectiveness in meeting identified needs.

3. Coordinate State outdoor recreation efforts with similar efforts of other levels of government. Particularly, planning and implementation efforts for State parks, reservoirs, trails, natural rivers, zoo and historic preservation should be coordinated in the early planning stages with local governmental units.

4. Assist in coordinating outdoor recreation efforts of the public and private sectors.

5. Continually strive to achieve more effective citizen involvement in its efforts to provide needed recreation opportunities.

6. Encourage the efforts of noncommercial private groups, such as charitable, service and civic organizations to acquire and conserve outdoor recreation resources that serve public needs.

7. Encourage noncommercial private interests to provide specialized facilities and programs that meet the needs of the special interest groups they serve.

8. Encourage and stimulate donations of recreation resources to appropriate public agencies by private individuals, foundations, and other groups.

9. Encourage the use of private educational institutions and foundations in recreation studies and research. Such organizations should also be encouraged to expand their education efforts in the field of outdoor recreation.

10. Promote the role of commercial recreation in providing facilities and services. When ancillary facilities (food concessions, lodging, and other services) are necessary to the overall enjoyment of a public recreation facility, private development and operation of these services is indicated. Government landholding agencies should continue

to encourage the development of desirable types of commercial outdoor recreation facilities by widespread publicizing of opportunities available to private operators through purchase, special use permits, or long-term leases of public lands.

11. Promote recreation services by commercial interests on private lands to augment areas and facilities provided by government.

12. Promote greater public recreation use of private lands--both large industrial holdings and smaller areas such as farms. In this connection, a well-considered system of reasonable user fees for certain classes of public recreation facilities would tend to encourage the provision of additional private facilities.

13. Stimulate diversified commercial recreation investments on private lands and waters. Technical and financial assistance, in appropriate cases, would help new enterprises to start and established ones to improve their operations.

14. Cooperate with all necessary agencies to insure wholesome health conditions and practices in recreation activities and areas.

Education and Research — 75-2.50

The State should:

1. Seek to further improve the high status of professional recreation education it now has.

2. Promote a close working relationship between those experienced in research methods and those recreation practitioners in the field to the end that applied research will provide information necessary to prepare and implement effective work plans for meeting identified outdoor recreation needs.

3. Recommend needed outdoor recreation research projects to the academic community.

4. Use consultants and contract for recreation research projects when such needed work is beyond the capabilities of State staff and of such a temporary nature that it is not feasible to develop inhouse expertise for such work.

Legislation — 75-2.60

The State should seek appropriate legislative action where needed to assure reasonable progress toward meeting outdoor recreation objectives. Legislative action for outdoor recreation should:

1. Establish broad policies regarding the provision of recreation services, areas and facilities and the protection, development and management of the State's outdoor recreation resources.

2. Provide enabling legislation, authority and control for the administration of recreation areas, facilities and services and for the protection, development and management of the State's outdoor recreation resources at the State and local government level.

3. Provide reasonable and realistic funding for recreation areas, facilities and services.

Planning — 75-2.70

The State should:

1. Develop and maintain a feasible and effective action program to assure an adequate environment (natural resources and institutional) for satisfying recreation experiences of sufficient quantity and quality for present and future citizens and out-of-state visitors.

2. Further refine and continuously maintain a broad conceptual framework within which the State will perform an effective outdoor recreation planning program.

3. Further develop and refine the overall objectives of the State regarding recreation in general, and specifically recreation planning.

4. Strengthen and refine the organizational structure, staff capability and cooperative arrangements for recreation planning on a statewide basis.

5. Refine its recreation information system for effective collection, analysis, storage, retrieval of necessary data and information needed for recreation planning.

6. Improve and continue to maintain effective relationships with the public sector (Federal, State, local), private sector, and commercial sector in order to assure maximum coordination and, where necessary, effective controls for the development and maintenance of effective and efficient use of the State's recreation resources (existing and potential) for present and future generations.

7. Develop and maintain a comprehensive outdoor recreation plan that will meet the requirements of the Bureau of Outdoor Recreation in maintaining eligibility for the State to participate in the Land and Water Conservation Fund Program.

8. Develop and maintain a recreation plan for the State which is coordinated with and a part of a statewide comprehensive development plan and coordinated with planning at other functional and jurisdictional levels.

9. Develop and maintain a planning program which will include all elements necessary to serve as a guide to all recreation programs and activities within the State, including the acquisition and development of land and water areas for recreation.

10. Develop and maintain goals and priorities within and among recreation programs for the efficient and effective accomplishment of recreation objectives.

11. Disseminate information to Federal, State, local, private agencies and the general citizenry concerning the recreation needs of the State and appropriate procedures, standards, criteria, and other means of alleviating these.

12. Strive for more meaningful citizen participation in outdoor recreation planning. For effective citizen participation there must be regular interaction. Goals must be established with consumers of recreation services. Invitations to join in programs and consultations on problem solving create mutual understanding and respect. Involvement in setting goals and objectives and in long and short range planning are essential for true cooperation among individuals and the institutions which they may represent.

13. Move forward aggressively in the development of a State land use plan.

14. Strengthen its capabilities and efforts for water-based outdoor recreation planning.

15. Insure that existing and proposed State outdoor recreation areas, facilities and services are part of a comprehensive planning effort.

16. Include on its outdoor recreation planning staff only those persons who have special expertise in various recreation and recreation-related fields.

17. Include in its outdoor recreation planning program those persons who will be responsible for implementing plan recommendations.

18. Establish a formal review process for all plan documents, describe the mechanics of the feedback process--learn what action and programs are effective and include them in plan revisions and updates.

19. Participate directly in special recreation studies in the State.

Technical and Financial Assistance — 75-2.80

The State should:

1. Assist local governments and private and commercial enterprises in planning and developing recreation facilities with particular emphasis on comprehensive recreation developments serving metropolitan areas.

2. Assist colleges and universities in providing courses of instruction in professional education and training for recreation personnel and promoting a statewide program for recruitment for this field. The State should also encourage and sponsor institutes, workshops and conferences to provide in-service training for professional and semi-professional personnel and for board and commission members.

3. Review all legislation pertaining to recreation, maintain up-to-date files of such legislation, keep abreast of needs for recreation legislation and perform a legislative advisory service to members of the General Assembly on recreation matters.

4. Provide technical assistance relating to management of outdoor recreation resources including areas of single and multiple use.

5. Promote the use of land use controls such as zoning and less-than-fee acquisitions where appropriate to provide recreation opportunities.

6. Promote ways and means for furthering the beautification of areas in design and layout--especially stressing preservation of the natural beauty of areas.

7. Conduct, sponsor, and endorse research and studies:

   (a) To define and implement a balanced program of recreation statewide, at the regional and local levels, and at the interstate and national levels were appropriate;

   (b) To check the misuse, abuse, and misinterpretation of the areas and facilities with special attention to the problem of vandalism;

   (c) To determine the place of recreation in habilitation, rehabilitation and prevention with regard to the ill and disabled within the population; and

   (d) To determine the social and economic factors relating to users of recreation areas, facilities and programs.

8. Encourage private and commercial enterprise to invest in recreation developments to meet identified needs.

9. Provide direct financial assistance where appropriate to local units of government.

10. Provide a relatively uniform statewide pattern for the organization and administration of recreation services at the local level in order to provide for reasonably equal recreation benefits and an equitable distribution of costs.

11. Enccurage compatible developments commensurate with the number of acres, terrain of property, vegetation, and other natural attributes.

12. Establish, in cooperation with State and local recreation administrators, guidelines for the charging of equitable fees for the use of public facilities.

13. Encourage industrial firms, service clubs, youth groups, and other council groups to invest in recreation sites and facilities for the enjoyment of members and their families.

14. Encourage local units of government to develop demonstration projects with innovative programming, design, development and administrative features.

15. Follow sound and accepted principles of community organization in the administration of its technical assistance program.

16. Continually appraise and upgrade its technical assistance services including the improvement of reports, surveys, studies and analysis undertaken as a part of this service.

Implications for Other Sectors (Federal, Local, Private) 75-3.00

Federal 75-3.10

The programs, projects and actions of the Federal Government have had very significant impact on recreation at all levels and in all sectors. This involvement of Federal Government will, and should, continue into the future. However, there should be a reduction in the total role and especially in relationship to units of government below the State level--city, county and multiple-county planning regions. In its proper role, the Federal Government should not be in direct contact, have contractual arrangements or deal directly with any unit of government below the State level.

It is a recognized fact that there are many program arrangements that are now beyond this proper role, and that changes of this type cannot be accomplished quickly. However, efforts to reverse this trend should be made.

Acquisition, Development and Administration of Areas and Facilities — 75-3.11

The Federal Government as a supplier of recreation areas and facilities should:

1. Manage federally-owned land and water resources for the broadest recreation use consistent with other important uses and in cooperation with the State.

2. Acquire and provide a broad spectrum of land and water areas that represent an appropriate balance among unique areas without reference to location or population centers. The listing (not by priority or importance) would include scenic areas, natural wonders, wilderness areas, wild rivers, historic sites, wildlife refuges, wetlands, parks, parkways, scenic roads, shorelines, and national recreation areas. The procedure would take cognizance of all State-owned areas of these types.

3. Give adequate consideration to aesthetic and outdoor recreation values in the planning of multiple-purpose water resource developments and allocate a fair share of such resources to outdoor recreation, fish and wildlife enhancement consistent with needs as determined by the State.

4. Provide adequate public health, safety, and pollution control measures in federally-administered recreation areas.

5. Maintain a continual review of policies regarding user fees applicable to appropriate classes of federally-administered recreation areas and facilities as they relate to State, local, and private interests.

Administration of Programs, Services, Regulations and Controls — 75-3.12

The Federal Government should:

1. Through its various land management, development, financial assistance, or loan guarantee programs which disturb the soil, utilize erosion control techniques, standards and requirements such as those developed by the Federal Water Pollution Control Administration and the Soil Conservation Service. It is further proposed that recipients of Federal financial assistance for such projects be encouraged and in special cases required to meet erosion control standards comparable to those applied to direct Federal projects.

Coordination — 75-3.13

The Federal Government should:

1. Cooperate with State and local agencies and individuals in encouraging the creation of privately developed commercial recreation areas for public use in surroundings of natural beauty and give consideration to the enhancement of private lands for public enjoyment through cost-sharing of projects which improve rural scenic values.

2. Encourage aggressive State and local government action and responsibility in recreation planning, development, and administration.

3. Encourage states to join in the promotion of interstate and regional agreements. Federal participation may be desirable and necessary in some cases.

4. Encourage all levels of government and private organizations to construct and operate recreation facilities on Federal lands, consistent with long-range comprehensive State and Federal plans.

5. Create and maintain a favorable climate within which private initiative, funds, and talent can successfully expand its outdoor recreation efforts consistent with identified needs.

6. Create and maintain a favorable climate within which other public sectors (State and local) can successfully expand their outdoor recreation efforts in concert with needs as identified in State plans.

7. Invite and encourage the states to participate in developing and maintaining the Nationwide Outdoor Recreation Plan at the policy and decision-making levels as well as for data gathering.

8. Coordinate the outdoor recreation efforts of all Federal agencies toward the accomplishment of goals which are established in a Nationwide Outdoor Recreation Plan.

9. Review and, where appropriate, recommend changes in all Federal criteria and guidelines for programs in outdoor recreation.

10. Coordinate the outdoor recreation efforts of the Federal Government with those of other public sectors and the private sector.

11. Cooperate with the states in developing realistic measures of the impact of interstate outdoor recreation activities.

12. Provide for instantaneous communication between different Federal agency units managing resources in close proximity. (i.e. Great Smoky Mountains National Park and TVA at Fontana)

Education and Research 75-3.14

The Federal Government should:

1. Continue to support and seek to expand research on the reclamation of surface-mined land.

2. Encourage and promote needed recreation research by government agencies, colleges, universities and private foundations.

3. Encourage institutions of higher learning to promote and develop recreation education within the classroom and develop professional leadership through workshops, forums, conferences, and in-service programs.

Legislation 75-3.15

The Bureau of Outdoor Recreation and other concerned agencies and groups should seek to secure congressional action to amend the Land and Water Conservation Fund law so that assistance may be provided under the program for indoor facilities and for operation and management expenses for public recreation programs.

Finances 75-3.16

The Federal Government should provide grants-in-aid to State and local governments for the planning, acquisition, and development of outdoor recreation resources and facilities.

Planning 75-3.17

The Federal Government should:

1. Develop and maintain a Nationwide OUtdoor Recreation Plan.

2. Give full consideration to recreation in the planning and conduct of programs in which substantial Federal funds are involved. This includes highway construction, agricultural conservation, pollution abatement, open space, and urban renewal.

3. Develop improved criteria, procedures and standards for evaluating benefits and losses to all measurable aspects of environmental quality at federally aided or authorized projects and incorporate them into project planning, and encourage and assist State and local agencies to follow similar procedures.

Technical Assistance — 75-3.18

The Federal Government should provide technical and financial assistance by:

1. Organizing an interagency committee to bring together public and private agencies for cooperation in advancing recreation throughout the states and Nation.

2. Acting as a national agency to assemble, exchange and develop all types of recreation resource material without duplication for the benefit and use by the states, their local governments, and the private sectors.

3. Promoting the adoption of adequate measures for public health, safety, and pollution control in State, local, and private recreation areas and facilities.

4. Providing technical assistance in outdoor recreation to the states.

5. Consult formally with State and local governments and private sectors to assure that they receive appropriate consideration in the disposal of surplus Federal property that can be used in recreation.

6. Encouraging state and local governments and private sectors to use public and private consultants in proper roles for expert advice and services.

7. Make technical assistance available to State and local governments in revising housing and building codes, zoning ordinances, subdivision regulations, and other laws and regulations in the interest of improving environmental quality, as related to recreation.

8. Promote the preservation of the scenic quality of private forest lands by offering cost-sharing incentives to landowners for investments and practices that provide natural beauty benefits to the public.

9. Providing technical advisory assistance to the states for the reclamation of surface-mined areas.

Local Government — 75-3.20

Cities and counties are the levels of government closest to the people. Thus, they are in the best position to know the needs and desires of their citizens and to gauge requirements for community and neighborhood recreation resources and facilities. They have an important responsibility for working closely with their citizens and local organizations in seeing that outdoor recreation needs are recognized, understood, and effectively met.

Acquisition, Development and Administration of Areas and Facilities — 75-3.21

Local government (counties and cities) as suppliers of recreation areas and facilities should:

1. Be the primary supplier of day-use, city-wide or county-wide recreation areas and facilities including large natural and manmade units.

2. Acquire, develop and maintain areas and facilities and administer public recreation programs that will serve the needs of neighborhoods, communities, municipalities, counties and regions.

3. Acquire in fee or through easements those rights in land and water which will permit the protection, development and management of public recreation use areas of adequate quality and carrying capacity conveniently located to major concentrations of population and provide an adequate financial structure to assure success of operation.

4. Make maximum use of such means as land-use zoning, subdivision regulations, and assessment practices to encourage the provision of outdoor recreation opportunities and the protection of open space.

5. Give increased consideration to recreation and open space requirements in developing plans for future urban expansion or renewal in relation to construction of schools, highways, water supply and refuse disposal systems and other public projects.

6. Provide for the water-based recreation needs of the citizens either through cooperative efforts with private companies and with the regional, State, or Federal Government, or provide such facilities entirely through local efforts.

7. Provide accessible basic recreation facilities to all urban residents.

8. Expand open space and outdoor recreation systems in, and adjacent to, metropolitan areas where the need and opportunity exists.

Administration of Programs, Services
Regulations and Controls

75-3.22

In order to provide a full range of recreation programs and services, local units of government should:

1. Establish a local department of recreation and parks responsible to the chief administrative body or officer of the jurisdiction (county or city), and charged with the responsibility of developing programs and facilities to meet the recreation needs of citizens.

2. Give priority to the resident and taxpayer when demand exceeds the capacity of an area, facility or program.

3. Provide activity programs for the ill and disabled. Whenever possible, these individuals should be included in regular programming but when this is not feasible, specialized programming needs to be considered. Also of importance is the involvement of those who have been away from their home environment receiving treatment or care of one kind or another.

4. Provide proper guidance and controls for private and commercial recreation-related interests. These will include zoning regulations and controls, as well as supervision and enforcement of high standards for structures and operational personnel, and the recreation service which is offered to the public.

5. Require developers of residential subdivisions to set aside adequate and appropriately located open space within each development for acquisition by the city or county at the raw land value within a reasonable time. High priority should be given to the preservation of streams, trees, land contours, and other features of the landscape.

Coordination 75-3.23

Local governments should be the catalytic agencies which bring related recreation and park activities in the community into such a juxtaposition that they bring about the desired results of planned recreation and park opportunities. Specifically they should:

1. Establish lines of communication with the institutions serving their communities to ensure that individuals returning to the communities are made aware of recreation and park programs available and are encouraged to participate. Also, local departments and institutions need to work together to ensure that programs within the institutions are relevant to the communities they are serving.

2. Develop agreements and operational policies for the recreation use of lands and facilities of other governmental units. The following are illustrations:

   (a) Public use for recreation of school district buildings and grounds when not needed for educational purposes.

   (b) Recreation use of water impoundments and adjacent land areas, when such use is consistent with public health and safety requirements.

   (c) Recreation uses of buffer zones which surround airports when such use is consistent and compatible with the primary operation.

   (d) Recreation use of other governmentally controlled facilities such as agricultural district properties, armories, and veterans buildings.

3. Seek regional, State or Federal assistance whenever necessary.

4. Cooperate with private investors who seek to establish new commercial recreation enterprises consistent with the development plans for the area.

5. Formulate cooperative agreements with community agencies to encourage the availability of recreation areas, facilities and programs within the jurisdiction's boundaries to their optimum-use capacity.

6. Develop joint policies between city and county to equalize recreation opportunities for all citizens and to equalize the payment for these opportunities.

Finances — 75-3.26

In financing and budgeting for recreation services, local governments should, insofar as allowed by law:

1. Carefully consider the possibilities of acquiring foundation funds for land acquisition and facility development, or consider establishing such foundations themselves.

2. Develop and maintain a local departmental long-range fiscal planning program. Emphasis should be placed on land acquisition and facility development as well as programs of activities.

3. Develop techniques to implement a program of improved maintenance and operation methods.

4. Provide adequate financing for recreation areas, facilities and programs under its jurisdiction through taxation, bond issues, and user fees as appropriate.

5. Accept gifts, endowments, and contributions from various sources to advance the program.

6. Propose local assessments and other local methods to pay the cost of the programs when local districts are established. There could be coordination with other county governmental services where feasible.

7. Counties offering no public recreation services should assist municipalities within the county to provide recreation services to those living outside their borders but within the county.

Planning 75-3.27

Local governments should:

1. Develop and maintain a comprehensive recreation plan for the city, county or other local jurisdiction by working cooperatively with all units of government. The plan should be officially adopted by the managing authority and should include an up-to-date inventory of existing and potential recreation resources. The plan should provide for:

   (a) Sufficient open space for the leisure needs of the citizen;

   (b) Arts and crafts; drama; dance; hobbies and clubs; music; nature; camping and conservation; reading, speaking and writing; social recreation; recreation travel; sports and games; and volunteer services to meet the cultural, social, athletic, and hobby interests of the citizens.

   (c) The preservation of the natural recreation assets, such as rivers, lakes, ocean, or bay fronts, for use by the public.

(d) Preservation of historical points of interest or heritages of beauty.

(e) A program of beautification of the city.

2. Design recreation and park areas for aesthetic values as well as for functional use and safety.

3. To the extent practical, design and construct every area and facility so that handicapped people of all kinds can find it possible to utilize the areas and facilities rather than having to be transported to special facilities.

4. Design neighborhood areas and facilities with sufficient flexibility so that people of the neighborhood can participate in a meaningful activity program as their age changes over the years.

5. Design school grounds and facilities so that they can be used by other organizations for recreation.

6. Continue to study and determine the recreation requirements of each newly annexed area, make these needs known, and carry out programs directed to meeting these needs.

7. Provide for a variety of recreation services to the inner-city residents.

8. Be the overall community recreation and parks planning agency, the motive force, the directional power for recreation land and water acquisition, recreation and park operation, and for major facility development and programming.

9. Back up their comprehensive recreation plan with functional site plans and designs. Area and facility development should incorporate materials that have low maintenance costs.

10. Prior to any recreation development, have site plans which include priorities for development, cost estimates for each element, maintenance costs, and operational fiscal requirements.

11. Through their plans and subdivision regulations, encourage the design of new neighborhoods to incorporate consideration of cluster development and other planned unit development, design innovations and variations in the siting of buildings and design and location of streets.

12. Periodically evaluate the values and benefits of each of their parks and recreation facilities in terms of their contribution to satisfying changing recreation needs.

Technical and Financial Assistance — 75-3.28

Local governments should:

1. Promote and assist in the provision of recreation services at the local and county levels, especially in areas where such services do not exist.

2. Encourage industrial firms, service clubs, youth groups, and other community groups to invest in recreation sites and facilities.

Private and Commercial — 75-3.30

Each agency or organization promoting nonprofit voluntary or commercial programs should have a set of policies relating to the special service rendered. These policies should conform to legal powers, regulations, and responsibilities and to the highest practical standards and practices.

The private sectors should have appropriate representation in all community recreation affairs.

Within communities, a comprehensive study of voluntary nonprofit and commercial recreation resources should be undertaken. The results of the survey should be used in planning a projected program of needed services and facilities.

The private nonprofit and commercial recreation fields should be innovative in the development of programs and facilities. The opportunities for experimentation and research are almost unlimited. Large scale efforts should be made to build the knowledge base from which expanded recreation opportunities, in both kind and degree, can be made available.

Chapter VIII	80-0.00 thru
State Action Program	81-0.00

Introduction 81-0.00

This chapter contains the actions the State of North Carolina will take in striving to attain its outdoor recreation objectives. The action program draws from all that precedes this Chapter, but, more specifically, it draws from: (1) the broad problem areas described in Chapter VII, (2) the results and recommendations of the special studies undertaken as part of this planning program and summarized in Chapters IV and V, and (3) the needs for acquisition and development reported in Chapter VI.

It is recognized that the State has a definite role in coordinating the total recreation actions within the State. Although no attempt is made to develop recommendations for action by any other sector--Federal, local, private or commercial--this action program provides a framework within which other sectors can operate. Where appropriate, specific reference is made to direct actions required by other sectors in helping the State achieve its outdoor recreation objectives.

Chapter VIII	82-0.00 thru
State Action Program	82-1.00

Problem Areas, Proposed Actions, and Recommendations 82-0.00

Problems Related to Land Use Planning and Control 82-1.00

From a comprehensive standpoint, present land use evidences (1) inadequate planning and guidance; (2) insufficient regulations and controls--manifested in both a lack of regulations and lack of enforcement of existing regulations; and (3) management practices that have achieved less than optimum results. These conditions have resulted in overall land use problems which are well exemplified in the coastal zone where rapid development is damaging beaches, marshes and dunes. Another aspect of overall land use problems is the need for accelerated pollution abatement programs, including sediment controls and animal waste treatment.

As an overall approach to this problem, a statewide land use policy consisting of an eight point program has been suggested: (1) a statewide land classification system, (2) tax policy adjustments, (3) a statewide development policy, (4) public land management standards, (5) plan and management programs for critical areas, (6) regional public land agencies, (7) A-95 review and clearinghouse system, and (8) statewide goals and policies. A brief discussion of each of these points is contained in Chapter VII under State Policy Formulation.

On a more specific level, a statewide land use program will require that land use regulations, standards and criteria be developed by the State and local governments. After these are developed, the State should guide and assist in their application and use.

It has been proposed that the expiration date for the North Carolina Environmental Policy Act be deleted, thus extending the Act into the future. More flexibility in terms of the subjects for comment in the Act is needed, and more emphasis should be placed on the analysis of alternatives in the development of environmental impact statements. There should be a requirement for environmental assessment at early stages of planning rather than immediately prior to project action. A further definition is needed of the delegation

of authority for decision making regarding the necessity for and the adequacy of environmental impact statements.

A Coastal Zone Management Act, which would further specify regulations and controls for the proper management of the coastal zone, has been proposed. Allied with this is the need for the State, in conjunction with the coastal counties, to identify the government ownership of land along the coast so that (1) full recognition of government title to land along the beaches, sounds and streams of the coastal zone is attained; (2) geographic limits to development can be determined; and (3) the authority and responsibility for regulating development can be better determined.

Relationship to Outdoor Recreation Objectives — 82-1.10

A statewide land-use policy should provide the framework in which the acquisition and development of recreation areas takes place. Recreation areas are a significant user of land, and meeting the future recreation requirements of the population will necessitate significant increases in the acreage devoted to recreation use. Thus, the entire spectrum of policy development and decision making regarding land use is interrelated with outdoor recreation objectives and goals.

Recommendations — 82-1.11

North Carolina outdoor recreation planners should both monitor the progress and be a part of the process of land use planning and control in order to assure attention to outdoor recreation objectives and goals.

Developing a Statewide Land Classification System — 82-1.20

Four categories of land are envisioned for the proposed land classification system--conservation lands, productive lands, developing urban areas, and urban areas. This system does not list recreation lands as a separate category. The State's outdoor recreation planners and those agencies which manage significant outdoor recreation lands must be involved as work progresses on the formulation of any type of land classification system.

Chapter VIII — State Action Program — 82-1.21 thru 82-1.40

Recommendation — 82-1.21

It is recommended that planners representing various recreation and recreation-related interests within State and local government and that a group representative of the managers of all classes of outdoor recreation sites in the State be invited to actively participate in the formulation of a statewide land classification system at the policy and decision-making level.

Plan and Management Programs for Critical Areas — 82-1.30

Certain unique natural areas (BOR Class IV) are being inventoried and catalogued in a manner similar to that being used in Illinois, Wisconsin, Tennessee, Georgia and several other States. The purpose of this program is to identify specific sites that could be preserved primarily for the purpose of education, but also for research and related ecological purposes. These sites will have potential for recreation use provided such use does not conflict with their primary purpose.

An Advisory Committee has been established to assist in the identification of these sites, and to recommend guidelines for their management and use. One of the most important guidelines will be a determination of the recommended use capacity of each particular site. In addition to completing the inventory and cataloguing this program will necessitate the establishment of priorities among the different areas, a schedule of acquisition, and the development of specific management criteria and procedures based upon the principles that have already been established for State Natural Areas. This program is in need of increased staff and funding.

Recommendation — 82-1.31

It is recommended that a two-year work schedule be developed and implemented for the completion of the inventory and cataloging tasks of this program, and that such staff required for accomplishing this by June 30, 1976, be assigned from the State Parks Division.

Management of Recreation Resources for Environmental Quality — 82-1.40

The use of adequate environmental practices in the acquisition, development, and management of outdoor recreation areas and facili-

ties is necessary in order to accomplish statewide land use objectives as well as outdoor recreation objectives. Principles for the management of recreation resources in an ecologically harmonious manner should be established. In order to accomplish this, continuing efforts must be made to acquire a better understanding of the best use of natural resources for recreation (i.e., reservoirs, islands, rivers, streams, flood plains, etc.).

Recommendations 82-1.41

1. It is recommended that land use management principles, criteria and procedures be developed (in a manner similar to the unit management plans developed by the U. S. Forest Service) for each park or recreation area operated or managed by the State; that such principles, criteria and procedures be submitted to the Department of Natural and Economic Resources review process for environmental impact statements, following which such procedures be implemented by the appropriate agency of State government.

2. It is recommended that, as a part of the State's technical assistance program in recreation, an information packet be developed to guide recreation administrators in using principles and practices for managing recreation areas in a manner harmonious with maintaining a quality environment.

3. It is recommended that a continuing effort be made to refine the system for screening Land and Water Conservation Fund projects in terms of environmental effects of such projects.

Water Resources 82-1.50

Plans and programs for water resources development and use have proceeded at a rapid pace. Recreation has become more and more significant as a "project purpose" in these programs, yet the State has no clearly defined overall policy concerning the recreational development and use of water resources. In addition, there is insufficient staff available to analyze the recreational

aspects of water resource development proposals and to relate these to the outdoor recreation needs of the State. Also, there is no effective means for the State to assure public access to reservoirs and lakes (including the State-owned lakes) or for the State to assure adequate recreation development of proposed reservoirs.

Recommendations 82-1.51

It is recommended that:

1. A clear policy statement be developed and approved which includes the State's policy concerning access to and planning for recreation use of lakes and reservoirs.

2. An evaluation be made of the present and potential recreation needs capable of being satisfied by each of the existing reservoir proposals. This evaluation shall include a detailed analysis of suitability, availability, and current use of existing and proposed projects within at least a 50 mile radius of the proposed project. It shall also include an objective analysis of the feasible alternatives to reservoirs, including the potential of the water proposed for impoundment being classified in the natural rivers system of the State.

3. An evaluation be made of the future recreation needs for reservoirs on a statewide and regional basis. Such evaluation shall include consideration of the relative distribution of reservoirs and: (a) the relationship of alternate resources including small reservoirs, free-flowing streams, ocean, and sounds to the need for large reservoir surface acreage; (b) the feasibility (in terms of physical characteristics, economic constraints, and competing resource uses) of existing rivers and streams being impounded for recreation and other purposes; (c) the interrelationships of existing reservoirs with proposed, planned, and studied

reservoirs in terms of recreation needs and related project purposes; and (d) the availability and suitability of existing and proposed reservoirs for recreation use.

4. A recreation plan be required for all reservoirs with a surface area of 1,000 acres or more.

5. Water resource development projects, in order to receive State approval, be required to provide adequate land for public access, and that such land be developed and administered by a public agency for public access and recreation.

6. There be a clarification and strict enforcement of the State policy for State-owned lakes to assure public access to them.

Insufficient Financial Support for Outdoor Recreation — 82-2.00

Rising outdoor recreation needs are outpacing the increases in financial support from all sectors--Federal, State, local government, private and commercial. Also, when considering all sources, funding is often erratic. There is need for a firm financial base as well as increases in total funding. A firm financial base would make possible a more uniform and predictable funding program. Supplemental funding would assist in providing a more sufficient level of funding.

These funding needs are especially evident in the public sector at the State and local levels in North Carolina.

State Government — 82-2.10

State government provides only 5.5% of the total outdoor recreation sites in the State and only 7.4% of the total acreage, as illustrated in Chapter VIII*. North Carolina ranks 36th in

*These percentages do not reflect all of the acreage in Game Lands managed by the North Carolina Wildlife Resources Commission.

the Nation in total state park acreage, 44th in the Nation in terms of expenditures per capita for state parks, and 50th in the Nation in terms of state park acreage per capita. The minimum acquisition and development cost estimate for existing state parks needs alone (not counting needs for other types of State operated outdoor recreation areas) is $27,781,000.

Recommendations 82-2.11

1. It is recommended that $16,122,400 be appropriated for the State Parks Capital Improvement Budget for 1973-75 as follows:

Improvements to existing facilities at State Parks ..	$1,121,000
Expansion of Existing Facilities at State Parks	588,000
Land Acquisition--10 New State Parks and 10 Existing State Parks	11,500,000
New Facilities for State Parks	2,913,400
Total	$16,122,400

The $11,500,000 request for land acquisition represents 27.6% of the total cost estimate for existing State Park needs and 41.4% of the minimum cost estimate for such needs.

2. It is recommended that, in addition to the State Parks Capital Improvement request, increased funds be made available for the addition of recreation areas on reservoirs, the State historic preservation program, State Forest recreation areas and the State wildlife resources program.

3. It is recommended that, through study and reorganization, efforts be made to improve fiscal planning and control for recreation as well as strengthened coordination of budgeting State funds for outdoor recreation.

Chapter VIII — 82-2.20 thru 82-2.21
State Action Program

Local Government — 82-2.20

Reference to Chapter VII reveals that, although local governments in North Carolina provide 30.9% of the total outdoor recreation sites, they provide only 1.4% of the total acreage. This is partially explained by the very nature of Class I sites which are the primary responsibility of local governments. In comparison to other Classes of outdoor recreation sites, Class I sites are small, have a high intensity of use, and are located in densely settled areas. This clarification does not deny the need for more recreation acreage for local governments.

The minimum acquisition and development cost estimate for existing Class I outdoor recreation needs $113,500,000.

Recommendations — 82-2.21

1. It is recommended that funding for outdoor recreation at the local level be increased through a State grant-in-aid program of $2,500,000 per year for acquisition of areas.

2. It is recommended that proposals to obtain increased financial support for recreation at the local level from public funds be strongly supported. Legislative action by the North Carolina General Assembly declaring recreation to be a necessary expense would greatly help by making local tax funds more accessible to local governmental units for recreation purposes.

3. It is recommended that increased efforts be made to obtain funds other than government appropriations from such sources as foundations, fund raising campaigns, business contributions, and fees and charges for recreation activities.

Chapter VIII	82-3.00 thru
State Action Program	82-3.11

Inequitable Distribution of Outdoor Recreation Opportunities on a Statewide Basis — 82-3.00

The needs for outdoor recreation areas are documented in Chapter VI, and the identification of this as a problem area is contained in Chapter VII. In terms of State actions, this problem is dealt with in two aspects: (1) those outdoor recreation needs that are primarily the responsibility of State government and (2) those outdoor recreation needs that are primarily the responsibility of local government.

State Government — 82-3.10

The overall problem is the lack of a sufficient quantity and variety of State-administered outdoor recreation areas, facilities and programs.

Recommendations — 82-3.11

It is recommended that the State, guided by current outdoor recreation needs data and the following directives, expand the number and variety of State-administered outdoor recreation opportunities.

1. Acquire, develop and administer public water access areas at intervals on the coast and other places in the coastal area.

2. Acquire, develop and administer access sites to rivers, lakes, streams and reservoirs.

3. Implement the State Natural Rivers Act.

4. Expand the system of State-administered natural areas, following completion of the inventory and cataloguing.

5. Establish a statewide trails system and assure the perpetuation of public access to the Appalachian Trail in the State.

6. Accelerate efforts to identify, acquire and preserve (or restore) areas and facilities of statewide historic/ cultural significance, and acquire additional trained personnel to plan and implement historic restoration and preservation programs, including research to determine what is of statewide historic significance.

7. Establish a natural areas trust and a natural areas preservation program.

8. Develop and implement a system of scenic roads and highways, including (1) practical methods to better protect, restore, and enhance corridors of scenic value traversed by highways, and (2) better control of unsightly features.

Local Government 82-3.20

The overall problem is the inequitable distribution of areas and facilities at the local governmental level to meet the outdoor recreation needs, especially of urban populations.

Recommendations 82-3.21

It is recommended that the capabilities of local units of government to meet identified outdoor recreation needs be improved through:

1. Assisting local government in identifying these needs.

2. Providing more administrative flexibility for local governments through amendments to the recreation enabling law, especially to clarify the authority of local governments to acquire, develop and administer recreation areas, facilities and programs outside their boundaries.

3. A State-sponsored and financed grant-in-aid program to supplement Federal and local financial programs for outdoor recreation at the local level.

4. Clarifying existing legislation concerning the provision of outdoor recreation areas by developers of residential subdivisions.

5. Legislation that would, for recreation purposes, allow for the purchase, at raw land value, of land that is being developed, especially near urban areas.

6. Encouraging solicitations for supplemental funds and other support such as gifts, bequests, and foundation grants.

7. Developing, through the State's technical assistance service, a program to assist local governments in ways of increasing efficiency, thus making existing funds go further in providing services. Such a program should include guidance in securing grant assistance.

Overall Administration of State Outdoor Recreation Programs and Services — 82-4.00

Fragmentation of Programs and Services — 82-4.10

There is fragmentation in the administration, planning, and coordination of outdoor recreation program functions in the State. There is need to develop clear objectives, administrative control, and assignment of responsibilities to provide a common thrust and greater commitment for an aggressive outdoor recreation program for the State.

Recommendations — 82-4.11

It is recommended that:

1. Responsibility for major outdoor recreation functions of State government be placed in one department to provide more effective administration, assignment of responsibilities

and coordination.

2. Effective SCORP planning capabilities be increased by improving organization and administration, strengthening the planning staff, timely completion of work elements including the contracting of specialized work when needed, and developing greater State commitment to the objectives and goals of State Comprehensive Outdoor Recreation Planning.

3. Outdoor recreation planning be made a staff function in the Office of Recreation Resources, Department of Natural and Economic Resources, and include planning functions now being carried out by the Recreation Division, the State Parks Division and the Federal Reservoir Division.

4. A Task Force for Recreation Resources in North Carolina be established. This Task Force, made up of representatives of Federal, State, local government, private and commercial sectors, should (1) establish the recreation roles of each level of government and the private and commercial sectors within the State, (2) broaden the functions to include coordination of planning and implementation, (3) develop programs to better inform all sectors of the responsibilities of each, and (4) assist in finding methods to more effectively carry out these responsibilities and to, thereby, provide more comprehensive recreation opportunities for all residents of the State. The coordination function should be broadened to include recreation programs (grant-in-aid and others) of the Bureau of Outdoor Recreation, Department of Housing and Urban Development, Tennessee Valley Authority, U. S. Army Corps of Engineers, U. S. Forest Service, Soil Conservation Service and others.

Technical Assistance — 82-4.20

The problem is the continued improvement in the quality, quantity and variety of technical services in recreation administered by the State.

Chapter VIII — State Action Program — 82-4.21 thru 82-4.31

Recommendations — 82-4.21

It is recommended that continuing efforts be made to strengthen and improve the present technical assistance service of the State in recreation. Specific improvements would include:

1. Use, when appropriate, of the automatic data processing capabilities of State government in developing and maintaining current studies and statistics concerning recreation.

2. Through the addition of a staff position, increase the assistance available for planning and carrying out in-service training programs at the community center, recreation supervisor and commissioner level.

3. Increasing the assistance available to local units of government for recreation planning through the addition of a staff person with this assignment.

4. Improve the number and quality of studies and reports that are developed concerning various aspects of recreation by adding a specialist for this to the staff.

Administration of the Land and Water Conservation Fund Program — 82-4.30

There is need for a more integrated and coordinated approach to the administration of the Land and Water Conservation Fund Program in the State.

Recommendations — 82-4.31

1. It is recommended that policies and procedures to guide the administration of the LWCF Program within the State be developed and carried out. The policies and procedures shall include the following:

a. A better definition of the role of the LWCF Review Committee as to its contribution to carrying out the LWCF Program in the State.

b. The assignment of the major functions of the program to one department in State government.

c. A requirement that all development project applications have a site plan.

d. Effective procedures to carry out the required inspection of LWCF projects--methods, procedures, guidelines, priorities.

e. A system for determining the priorities of LWCF projects.

2. It is recommended that a study be made to determine the optimum staff required to service the increasing number of LWCF project applications and the greatly added responsibilities for inspection, and that sufficient staff be assigned to service the program as determined by the study.

Participation and Coordination — 82-4.40

The problem is in obtaining optimum participation by and coordination with all concerned in the planning, development, and administration of recreation opportunities and services in the State.

Recommendations — 82-4.41

1. It is recommended that the SCORP be taken "to the people" in a series of conferences or hearings scheduled sequentially throughout the State in order to reach the greatest possible number of people with the most effective presentation.

Oral statements would be welcomed from interested persons at the conferences or written statements would be received for review. Such comments and general reactions would be used in guiding future SCORP planning efforts in the State.

2. It is recommended that a study be undertaken to determine the need for and benefits of the institution of an annual meeting of representatives from the varied recreation interests in the State. Such a meeting would have as its primary aim the mutual sharing of work currently in process and schedules for the near future in order to assure optimum coordination of recreation efforts in the State.

3. It is recommended that a periodical newsletter, bulletin or magazine be published by the State's technical assistance service to disseminate information about recreation matters that may be of concern to citizens and recreation professionals in the State. Again, the major purpose of such a publication would be to help assure optimum coordination of recreation efforts in the State.

4. It is recommended that all outdoor recreation planning efforts within the State make as great a use as is practical of multi-jurisdictional and multi-disciplinary planning to achieve greater flexibility. Emphasis should be placed on the Multi-county planning regions as the focal points for coordinating such efforts below the statewide level.

5. It is recommended that the SCORP planning staff be represented on all major and significant recreation undertakings within the State.

6. It is recommended that the State's technical assistance service continue diligent efforts to encourage and assist in coordinating recreation programs and efforts of and with the local governmental sector.

Chapter VIII — 82-4.50 thru 82-4.61

State Action Program

Architectural Barriers — 82-4.50

The problem is in the elimination, to the extent practical, of architectural barriers to the handicapped in outdoor recreation areas, facilities, and programs.

Recommendations — 82-4.51

It is recommended that:

1. Building codes and standards relative to architectural barriers be strictly enforced.
2. All architectural barriers from existing and proposed outdoor recreation projects be removed to the extent practical.
3. Only those projects (LWCF and others) that include designs to alleviate architectural barriers be approved.

Optimum Use of Outdoor Recreation Resources — 82-4.60

The problem is in attaining the optimum use of existing and potential recreation resources without degradation or damage.

Recommendations — 82-4.61

It is recommended that:

1. Optimum carrying capacities for the various classes and types of outdoor recreation areas and facilities be developed and not be allowed to be exceeded.
2. Criteria and standards be established for the development of outdoor recreation areas and facilities in such a way that they are capable of sustaining the optimum use as determined through carrying out recommendation (1) above.

3. Those responsible for planning, developing and maintaining the State's recreation resources be alert for improvements in materials and techniques of development, construction and maintenance of recreation areas and facilities.

4. Through its planning, technical and financial assistance programs, the State encourage greater use of flood plains for recreation by developing alternatives to the traditional civil works project of reservoirs and channel works. There are serious needs in urban areas for recreation, open space and greenways that can be achieved in flood plains without additional flood management measures. There must be strong proposals for this type project that are practical, technically sound and related to needs.

5. A guide to available technical and financial assistance regarding recreation use, development and operation of present and potential reservoirs be developed.

Staffing of Programs and Services — 82-4.70

The problem is in the continual improvement of recreation staffing in terms of both quantity and quality. In an effort to better understand the overall recreation manpower situation in North Carolina, a Manpower Study was initiated. An initial report has been made containing several recommendations. The study is one of four which make up the Recreation Education and Personnel Management Study. The other three studies are concerned with (1) training units, (2) coordination of curriculum content with the needs in the field and (3) careers--the dissemination at high school career days of information concerning employment in the field of parks and recreation.

Recommendations 82-4.71

It is recommended that:

1. The Recreation Manpower Study be maintained on a continuing basis and that the current recommendations of that study be implemented. Such efforts are needed in order to identify trends and to relate supply and demand to the enrollment and graduation of recreation and park personnel.

2. Education and in-service training programs to improve recreation personnel capabilities be conducted at the State level and that such programs be encouraged and assisted by the State for local units of government.

3. Efforts be continued to maintain and improve the status of the State as an education mecca for recreation and park professionals.

4. Continual efforts be made to provide for quality professional recreation leadership at all levels and in all sectors.

5. Continuing efforts be made to improve recreation curricula at institutions of higher learning.

6. The training programs offered through State government's technical assistance program be continued and improved as needed.

7. Research programs be conducted directly by the State or with State assistance to further define staff needs for all phases and sectors of outdoor recreation.

Chapter VIII	82-4.80 thru
State Action Program	82-4.81

Education

82-4.80

There appears to be a general lack of knowledge and appreciation of the opportunities, potentials, and proper use of North Carolina's outdoor recreation resources by the general public.

Recommendations

82-4.81

It is recommended that:

1. A summary of this SCORP be written, published and widely distributed.

2. Efforts be made through the State's travel and promotion program, recreation technical assistance program, community colleges and through the public school program to instill a better knowledge of, and appreciation for, the State's outdoor recreation resources and their proper use. Techniques should include slide presentations, media productions and printed materials.

3. Efforts to teach proper use of facilities in State-operated outdoor recreation areas be intensified.

North Carolina's Continuing Planning Program For Outdoor Recreation

The purpose of this section is to indicate general directions that will be taken in the next phase of the continuing outdoor recreation planning program in North Carolina. The essence of planning is in establishing courses of action directed toward accomplishing some objective. Following the completion of a plan or a planning program, the logical extension is action. Planning involves a rational anticipation of the future and culminates in an outline of actions which, when accomplished, influence the course of events in such a way as to achieve desired goals. Planning, then, must (1) involve the future, (2) be oriented to action, and (3) designate some agent with the responsibility of seeing that the planned action is carried out. Further, the development of a plan requires (1) a knowledge of conditions, needs, and resources as they presently exist; (2) a picture of things as they should be (or are desired to be)--needs, goals, and objectives; (3) a listing and analysis of alternative actions which will lead to the accomplishment of objectives; and (4) the selection of a plan of action among the alternatives.

Much of the preceding action program for the State will require the involvement of the SCORP planning staff and will necessarily be included in the next planning program. Some of these actions that are of greatest relevance to the continuing SCORP planning program are outlined as follows:

1. Monitor the progress and be a part of the process of land use planning and control in order to assure attention to outdoor recreation objectives and goals.

2. Clarify existing legislation concerning the provision of outdoor recreation areas by developers of residential sub-divisions.

3. Implement the State Natural Rivers Act.

4. Establish a State Trails System.

5. Establish a Natural Areas Trust and a Natural Areas Preserve System.

6. Develop and implement a system of scenic roads and parkways.

7. Increase SCORP planning capabilities by (1) increasing staff--manpower and knowledge; (2) timely completion of work elements including the contracting of specialized work when needed; and (3) developing greater State commitment to the outdoor recreation planning program.

8. Take the SCORP to the people in a series of conferences or hearings throughout the State. Graphics, visual displays, audio-visual and multi-media presentations for displaying data and for informing the public of overall outdoor recreation supply, demands, needs and potentials in the State should be developed for use in these conferences.

9. Develop optimum carrying capacities for the various classes and subclasses of outdoor recreation areas.

10. Write, publish and distribute a summary of this SCORP.

11. Develop mass education materials on how to appreciate and use recreation resources.

12. Determine the recreation priorities of existing reservoir proposals in relation to total outdoor recreation needs in the State.

In addition to a consideration of the above as work elements, it is recommended that the following activities be included in the next SCORP planning program:

1. Develop more refined methods, criteria and standards for determining a desirable rural-urban balance for outdoor recreation opportunities--assess the unique needs of large urban populations for close-to-home outdoor recreation as opposed to the needs for high quality scenic areas.

2. Further study the recreation needs of special populations on a multi-county planning region basis.

3. Refine and enlarge the data available on trails, scenic highways and natural rivers in order to add to the variety of recreation opportunities available in the State.

4. Continue refining the outdoor recreation information system, including aspects of supply, demand, needs, potentials, activity trends, area and facility standards and priorities. More specifically, it is recommended that:

   a. A program be established for the maintenance of the North Carolina Outdoor Recreation Areas Inventory in such a way that information for each county is updated on a rotating basis within five-year intervals, as illustrated in Table VIII-1 and Figure VIII-1.

   b. Validate and publish maps indicating locations of the areas contained in the Outdoor Recreation Areas Inventory.

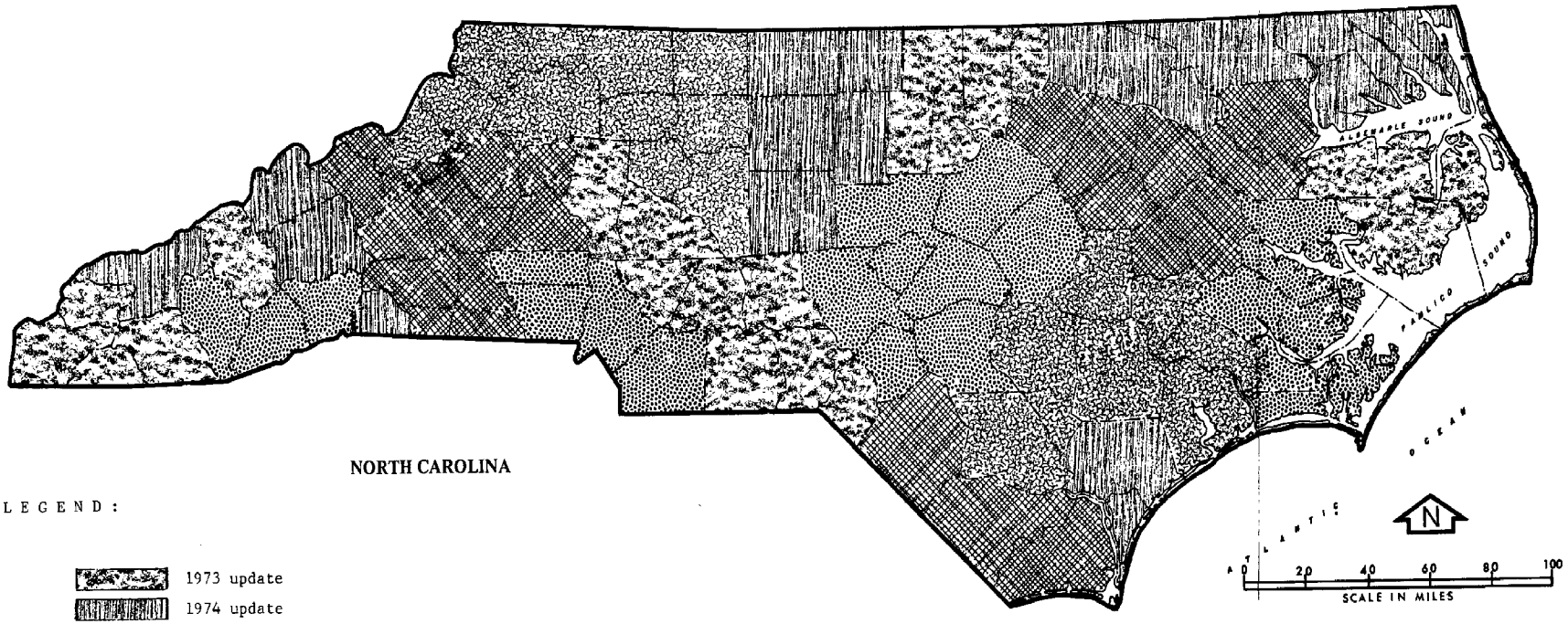
   c. Refine and increase data utilization programs and staff analytical capabilities.

TABLE VIII. 1

(88-0.00)

SCHEDULE FOR UPDATING NORTH CAROLINA
OUTDOOR RECREATION AREAS INVENTORY

Regional Office	Year and Counties to be Updated				
	1973	1974	1975	1976	1977
Asheville	Cherokee Clay Graham Macon Haywood	Swain Buncombe Madison Polk	Jackson Transylvania Henderson	Cleveland McDowell Rutherford Yancey Mitchell	Avery Watauga Ashe Alleghany Wilkes
Salisbury	Iredell Rowan Cabarrus Stanly	Alamance Caswell Randolph Rockingham Guilford	Lincoln Gaston Mecklenburg Union	Alexander Burke Caldwell Catawba	Surry Stokes Yadkin Forsyth Davidson Davie
Raleigh	Person Orange Durham Granville Vance	Warren Halifax Northampton	Wake Johnston Chatham Lee	Franklin Nash Wilson Edgecombe	Assist Other Regions
Fayetteville	Anson Montgomery Richmond Scotland	Pender New Hanover	Cumberland Harnett Moore Hoke	Robeson Columbus Brunswick	Bladen Sampson
Washington	Washington Tyrrell Hyde Dare	Camden Currituck Hertford Gates Chowan Perquimans Pasquotank	Beaufort Craven Pamlico Carteret	Greene Pitt Martin Bertie	Onslow Duplin Wayne Lenoir Jones



NORTH CAROLINA

LEGEND:

- 1973 update
- 1974 update
- 1975 update
- 1976 update
- 1977 update

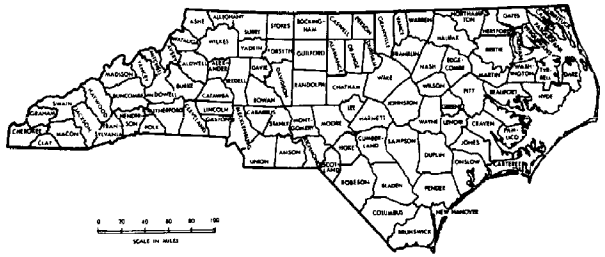


Figure VIII.1
(88-0.00)

NORTH CAROLINA OUTDOOR RECREATION PLAN
DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES
COUNTIES SHOWING:

Five Year Schedule for Updating the
North Carolina Outdoor Recreation Areas Inventory

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