

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

ALASKA OUTDOOR RECREATION PLAN

VOLUME TWO, OUTDOOR RECREATION IN ALASKA



ALASKA OUTDOOR RECREATION PLAN

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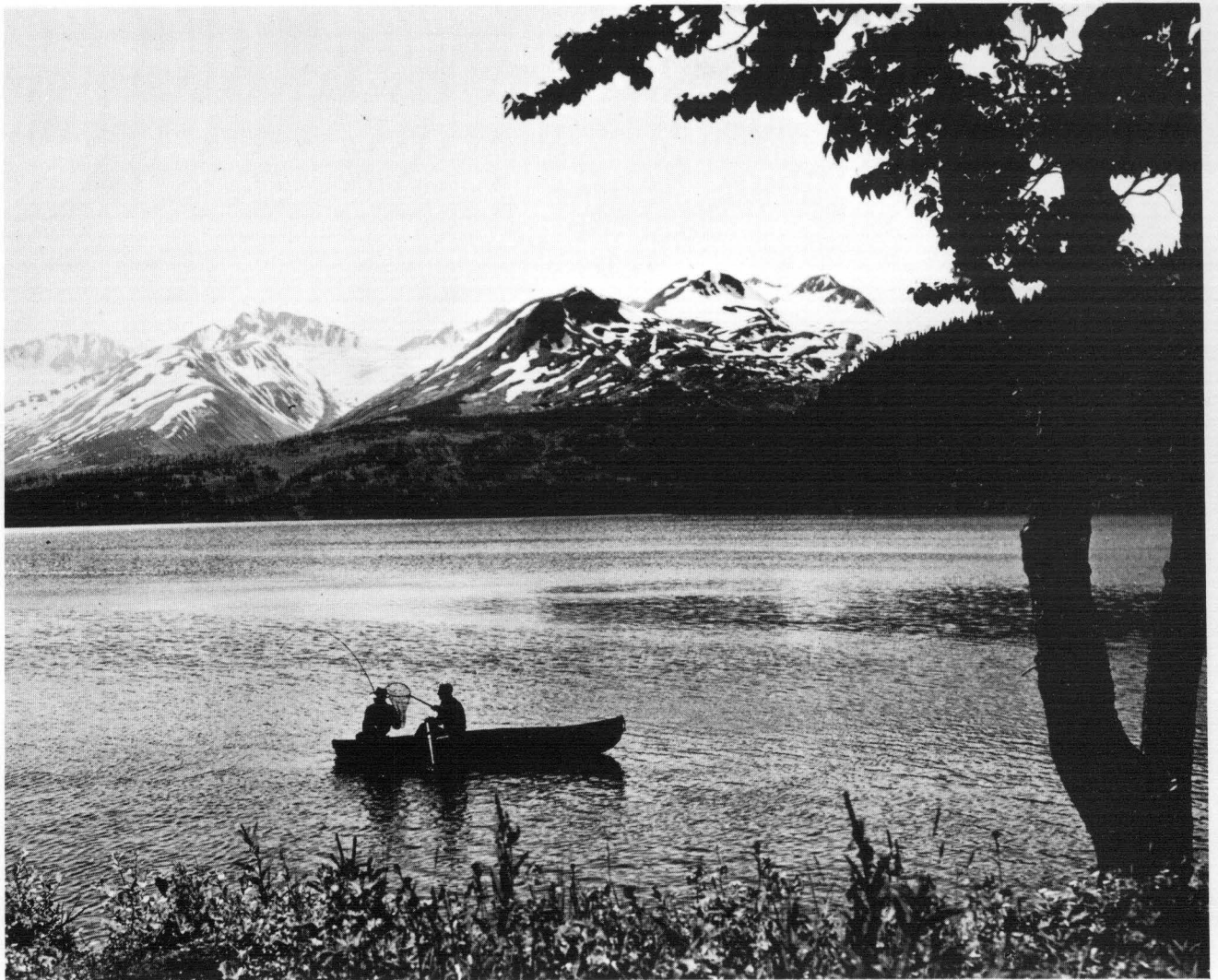
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Chapter I

INTRODUCTION



Fishing on the Kenai Peninsula

I - INTRODUCTION

In "Outdoor Recreation for America, A Report to the President and to the Congress by the Outdoor Recreation Resources Review Commission," January 1962, the following recommendation is made regarding State-level responsibilities for outdoor recreation planning:

"In a national effort to improve outdoor recreation opportunities, State governments should play the pivotal role. They are more advantageously situated than either local units or the Federal Government to deal with many current recreation problems. States have direct experience in shaping programs to meet varying conditions and particular needs of their citizens. They have the necessary legal authority to do this and moreover, the States occupy a key position - the middle level in our complex system of government. They deal with other states, work with a great variety of agencies at the national level, and are responsible for guiding and assisting all the political subdivisions within the state - villages, cities, towns, counties, and metropolitan regions. Since other responsibilities that affect outdoor recreation opportunities, such as highway construction and the management of forest, wildlife, and water resources, are also generally focused at this level, the State government can make sure that these programs are in harmony with its recreation objectives."

This recommendation is supported by the Bureau of Outdoor Recreation Manual, which further asserts (Part 630.1.1) that the Statewide outdoor recreation plan should "reflect the State's key position in responding to local conditions and needs and in integrating effectively Federal, State, local, and private programs and actions in outdoor recreation. The Bureau's planning guidelines and requirements are not oriented solely to Federally-assisted outdoor recreation activities, but are intended to influence the entire range of recreation resources and programs in the State."

This introduction to the Alaska Outdoor Recreation Plan acknowledges the State of Alaska's responsibility for comprehensive outdoor recreation planning, sets forth the objectives of the Plan, and outlines its structure. The chapter is divided into three sections, as follows:

- A - Outdoor Recreation Goals, which presents the goals of the State of Alaska concerning its natural and human resources and cites their legal bases
- B - Objectives Of The Alaska Outdoor Recreation Plan, which describes how the Plan serves as a guide to achieving the established goals and cites the legal authority of the Department of Natural Resources for recreation planning
- C - Organization Of The Plan, which outlines the Plan's volumes and chapters.

A - OUTDOOR RECREATION GOALS

As the principal speaker at the 1968 Alaskan of the Year Banquet, Arthur J. Goldberg said:

"I hope you Alaskans properly evaluate the true nature and extent of your resources. I do not refer to your oil and mineral deposits, valuable and important as they are to Alaska's economic growth and development.

"Rather, I refer to the spaciousness of your skies, the purple and white majesty of your mountains, the silence of your wilderness, the openness of your spaces, the uniqueness of your wildlife and plants, the purity of your waters, the diversity of your cultures, and the freshness of your air.

"In this age of increasing leisure and mobility and in man's search to recapture his identity, these treasures, in the long run, may realize more for Alaska, even in a material sense, than the oil deposits of the North Slope.

"But there is no need to sacrifice one of these assets for the other. Conservation need not be an enemy to progress nor progress to conservation. But unthinking and unplanned waste and exploitation of resources or stubborn resistance to change can be an enemy of both. Here, as elsewhere, both eternal vigilance and sensible accommodation are the earmarks of a good society."

The State of Alaska fully agrees with this concept that outdoor recreation can be the synthesis of conservation and development:

- Conservation, because certain portions of the most extensive wilderness remaining in the United States can be preserved to provide permanent opportunities for wilderness experiences, and because the areas and facilities to be developed for more intensive recreational use can be kept compatible with the esthetic attributes of the environment
- Development, because outdoor recreation is a major aspect of economic development, involves large capital investments, is a labor-intensive industry, and will increase in importance as a major source of income to the Alaskan economy.

Wise development involves utilizing natural and cultural resources in ways which benefit the greatest number of people for the longest period of time. To develop is to grow and to foster a productive attitude as well as the mass production of goods. Wise conservation controls the use of resources so that they can continue to satisfy man's needs into the future. Compatible approaches to conservation and development thus are proper goals for Alaska. More specifically, Alaska's outdoor recreations goals are:

- To provide outdoor recreation opportunities for Alaska's residents and visitors.
- To preserve the high quality of the Alaskan environment.

RECREATION OPPORTUNITIES

Both desire and time for recreation activities have increased dramatically in recent years. Automation is a major contributor to the additional leisure time, but it is also a cause for concern, to the extent that it impairs a man's ability to be active and useful. In an increasingly mechanized society, outdoor recreation is one of the great opportunities for a man to maintain his identity as a human being, or to recreate himself.

Opportunities For Alaska Residents

Most residents live in Alaska by choice, and a major reason for the choice is the natural beauty of the surroundings and the many opportunities for outdoor recreation activities close to home and in the back country. Thus,

Alaskan residents are much concerned with preservation of existing opportunities, acquisition of some lost opportunities, and improved means of access to, and facilities for, other recreation opportunities.

Opportunities For Visitors To Alaska

As the world becomes more crowded, and as long as the more temperate latitudes of the country have a population density many times greater than Alaska's two square miles per resident, the 49th State will be a mecca for people seeking a brief "return to nature." Alaska must be considered a national and even international resource of great value, and must be both preserved and developed to satisfy the recreational needs of much of the nation's population.

ENVIRONMENTAL QUALITY

Even beyond its pertinence to the goal of satisfying the recreation needs of Alaskan residents and visitors, the perpetuation of a high-quality environment warrants attention as a major Alaskan goal in itself. An environment free from pollution has far more value than the mere provision of clean and inspiring places for outdoor recreation activities; it is an important element in the general health and happiness - indeed, the total life - of all citizens. Opportunities to preserve natural beauty near where we work as well as where we play are becoming increasingly rare, but this is still a real possibility in Alaska.

RECREATION GOALS AS DEFINED BY LAW

The State's goals relative to the provision of outdoor recreation opportunities are set forth in Alaska Statutes: Public Resources, Section 41.20.010, which states as the basic purpose "to foster the growth and development of a system of parks and recreational facilities and opportunities in the State, for the general health, welfare, education, and enjoyment of its citizens and for the attraction of visitors to the State."

The goal of preserving a high-quality environment is stated in the State Constitution, Article VIII, Section 2, which states, "The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including lands and waters, for the maximum benefit of its people."

B - OBJECTIVES OF THE ALASKA OUTDOOR RECREATION PLAN

As the official Statewide Outdoor Recreation Plan for Alaska, this document is intended to serve as a guide to achieving the established goals, by providing guidelines for making decisions in the field of outdoor recreation.

Outdoor recreation needs, of both residents and nonresidents, for space, access, and facilities are quantified, and a plan of action to satisfy the unmet needs is set forth. The recommendations do not, for the most part, specify individual sites, but instead identify needs by region within Alaska, as a broad guide to the detailed planning which the various responsible agencies should undertake to transform these recommendations into reality.

Challenges to the preservation of Alaska's high-quality environment are discussed, natural and historical values that warrant protection are identified, and recommendations are made which should assist decision-making as Alaska enters a period of rapid transition.

Thus, the Alaska Outdoor Recreation Plan, besides expressing the outdoor recreation needs of those who use Alaska's recreational resources, is designed to become an element of the future Alaska Comprehensive Development Plan, and close liaison has been maintained with the Division of Planning and Research throughout the planning process.

The Plan is also intended to maintain the State's eligibility to participate in the Land and Water Conservation Fund grant program, and thereby to make available additional means of achieving the goals which have been established.

Responsibility for outdoor recreation planning is assigned to the Alaska Department of Natural Resources by Alaska Statutes: Public Resources, Section 41.20.020, which gives the Department the legal authority to:

- "Develop a continuing plan for the conservation and maximum use in the public interest of the scenic, historic, archaeological, scientific, biological, and recreational resources of the State.
- "Plan for the development of a system of State parks and recreational facilities, to be established as the legislature authorizes and directs.

- "Cooperate with the United States and its agencies and local subdivisions of the State to secure the effective supervision, improvement, development, extension, and maintenance of State parks, State monuments, State historical areas, and State recreational areas...
- "Provide for consulting service designed to develop local park and recreation facilities and programs.
- "Provide clearing-house services for other State agencies concerned with park and recreation matters."

C - ORGANIZATION OF THE PLAN

The Alaska Outdoor Recreation Plan is presented in four volumes.

Volume One, Summary Of Alaska's Outdoor Recreation Plan, briefly summarizes the contents of the other three volumes, and constitutes a document suitable for general distribution.

Volume Two, Outdoor Recreation In Alaska, presents fundamental information about Alaska's present recreation resources, needs, and problem areas. It is divided into seven chapters, as follows:

- I - Introduction describes the State's recreation goals, the objectives of the Plan, the State's legal authority for recreation planning, and the organization of the Plan as a whole.
- II - Development Of Alaska's Outdoor Recreation Plan discusses the basic approaches used in preparing the Plan.
- III - Description Of Alaska provides information about Alaska's history, population, economy, government, land ownership, and other key facets.
- IV - Supply Of Outdoor Recreation Resources provides a general description of existing recreation resources and details the present supply of programs, space and facilities available to outdoor recreation participants in Alaska.
- V - Present And Future Demand For Outdoor Recreation examines the popular recreation activities in Alaska, analyzes the factors which will influence future demand, and projects the future demand for these activities.
- VI - Needs For Outdoor Recreation Areas And Facilities identifies Alaska's recreation needs for the next five years and beyond, by relating "supply" (Chapter IV) to "demand" (Chapter V).
- VII - Related Areas Of Special Needs discusses certain important needs not easily quantified and not specifically related to individual recreation activities.

Volume Three, Plan Of Action For Implementation, draws upon the material developed in Volume Two to define the actions which will be required to meet Alaska's outdoor recreation needs.

Volume Four, Appendixes, brings together in a separate document much of the technical supporting data developed in the course of preparing the Plan.

Chapter II

DEVELOPMENT OF ALASKA'S OUTDOOR RECREATION PLAN



Dog Mushing in Northwestern Alaska

II - DEVELOPMENT OF ALASKA'S OUTDOOR RECREATION PLAN

This chapter covers the overall approach followed in preparing Alaska's Outdoor Recreation Plan. It is divided into two sections:

A - Background, which describes briefly the history of comprehensive recreation planning and Alaska's two earlier plans.

B - Basic Approach, which explains the formula and the planning process used to prepare the plan, identifies the major participants in the project, and defines the regional breakdowns which were used.

A - BACKGROUND

This section provides a brief review of past and present efforts by the Federal Government and the State of Alaska in planning for outdoor recreation.

OUTDOOR RECREATION PLANNING

In 1958, Congress established the Outdoor Recreation Resources Review Commission (ORRRC), for the purpose of assessing the recreation resources and the needs of present and future generations, and recommending to the Congress and the President policies and programs designed to fill these needs.

In early 1962, the Commission presented its findings. From its research came the impetus for a number of major programs, including:

- Creation of the Bureau of Outdoor Recreation (BOR), established initially by the Secretary of the Interior in April 1962, with a Congressional Organic Act for the Bureau (Public Law 88-29) following a year later
- Passage of the Land and Water Conservation Fund Act of 1965 (Public Law 88-578), which provides for joint Federal/state participation in planning, acquiring and developing specific outdoor recreation areas and facilities.

To establish and retain eligibility for Federal assistance in acquisition and development projects, each state was to prepare and maintain a comprehensive statewide outdoor recreation plan which fulfilled the requirements of the Land and Water Conservation Fund Act and the Secretary of the Interior as spelled out in the Bureau of Outdoor Recreation Grants-In-Aid Manual.

The basic purpose of the planning effort was (and is) to provide a program for the orderly development of each state's outdoor recreation resources, a program which will meet the growing needs of both residents and nonresidents in the immediate and longer-term future while also protecting outstanding natural resources for future generations.

ALASKA'S PREVIOUS PLANNING

The State of Alaska submitted its original plan, "Alaska's Public Outdoor Recreation Plan," in September 1965. This document was put together quickly, to ensure that the State would be found eligible to participate in the Land and Water Conservation Fund. The plan ensured Alaska's eligibility to December 1966.

A second plan was submitted in October 1966; this revised plan developed more comprehensive inventories of recreation areas and facilities in Alaska, updated and strengthened the analysis of demands (using ORRRC-generated data on participation in recreation), and provided more specific guidelines for project evaluation and future planning. This second plan extended Alaska's eligibility to October 1969.

FUNDED PROJECTS

Through 1968, Alaska's eligibility to participate in the Land and Water Conservation Fund has entitled the State to receive \$2,337,000 in Federal matching funds for outdoor recreation purposes. These funds have gone toward providing such areas and facilities as:

- Nancy Lake State Recreation Area, a 21,000-acre complex which will offer a wide variety of recreational opportunities (camping, fishing, golf, swimming, hiking, etc.) at a location within easy driving distance (66 miles) of Anchorage, the State's largest city
- Sandy Beach Recreation Area, a municipal beach planned for the Greater Juneau area, providing facilities for swimming, picnicking, and a variety of outdoor games and sports; this area could not have been developed without monies from the Land and Water Conservation Fund

- Chester Creek Green Belt, a seven-mile open green belt of 270 acres running through the heart of Anchorage, providing a wide range of facilities for recreation including baseball, football soccer fields, as well as trails for cross-country skiing, horse-back riding, hiking, and bicycling.

Recent amendment of the Land and Water Conservation Fund Act has authorized the Fund at not less than \$200 million for each of five fiscal years beginning July 1, 1968, and ending June 30, 1973. On the basis of the previous allotment formula, the effect of this change will be to increase Alaska's share of the Fund to approximately \$900,000 annually for the five-year period, if the State maintains an eligible plan and if the total funds authorized are appropriated by Congress each year.

B - BASIC APPROACH

This section focuses on the fundamental concepts used to develop Alaska's Outdoor Recreation Plan, reviews the steps in the planning process, identifies the major participants, and defines the planning regions used.

CONCEPT FOR RECREATION PLANNING

The primary objective in preparing Alaska's Outdoor Recreation Plan has been to develop a creative action program, designed to meet present and projected resident and visitor outdoor recreation needs which have been identified by research and analysis. In essence, the plan provides a framework to guide the efforts of the public and private sectors in meeting Alaska's needs.

Perhaps the clearest way to visualize the process of preparing an outdoor recreation plan is to reduce it to the simple concept:

$$\text{Demand} - \text{Supply} = \text{Needs}$$

- "Demand," as used throughout most of this report, refers to actual participation in outdoor recreation activities. The term does not involve the traditional concept of relating the amount of demand to price, nor does it include "latent" demand, which is not exercised because required facilities are lacking, too far away, or of unsatisfactory quality. However, the latent demand for the various activities and facilities is discussed in the text of Chapter V.
- "Supply," as used here, includes the areas, facilities, sites, fish and game found throughout Alaska and available for outdoor recreation. To a lesser extent, the term also involves the programs of all agencies which can shape and develop these resources.
- "Needs," for the purposes of this plan, are defined as the difference between demand and supply at any given time.

Exhibit II-1, on the following page, depicts graphically how this concept is applied to the process of preparing an outdoor recreation plan. The first step (circle 1 on the exhibit) was to prepare an inventory of the areas and facilities available in Alaska for camping, fishing, hiking, and all other major outdoor activities which both Alaskans and the State's many visitors enjoy. This inventory identified in detail both existing areas and facilities and those programmed* for development over the coming year. In addition, information identifying areas with significant potential for future development was collected and evaluated. All of this information, together with material explaining the roles and responsibilities of the Federal, State, local, "quasi-public"** and private agencies active in recreation, constitutes a basic inventory of the areas, facilities, agencies and programs which are available or which provide opportunities for outdoor recreation.

The development of data on current demand was the second step in planning (circle 2 on the exhibit). Here, the purpose was to create a basic profile of present and future outdoor recreation demand. This involved interviews and mail-back questionnaires covering 3,741 residents and visitors, asking them what they had done, what they enjoyed, where and how long they participated in these activities, and many other questions, so that a picture of present demands could be developed. This information was supplemented by on-site observations and statistics to clarify further the profile of existing demand.

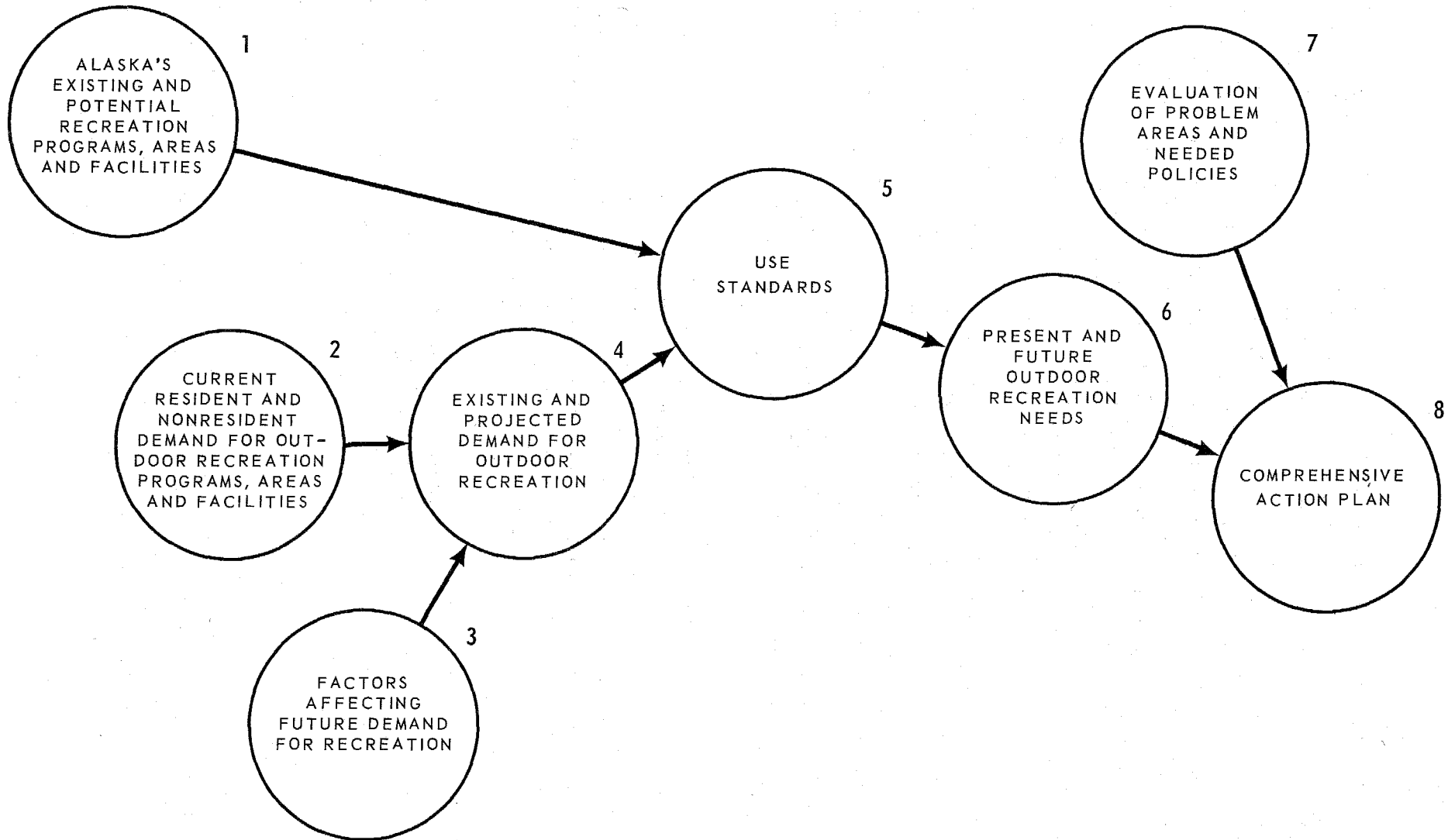
Next, factors were considered which will affect future demand, (circle 3 in Exhibit II-1). These factors included the growth in population and in non-resident visits which can be expected to occur over the coming years, as well as the increasing amounts of time and money available to spend on outdoor recreation activities, and the steadily improving accessibility of the State's resources due to better highway and airway systems. Additional factors which tend to influence the demand for outdoor recreation, such as age, education and occupation, were also considered.

The profile of existing demand, combined with an evaluation of factors affecting future demand, provided the basis for estimating the future demand for outdoor recreation in Alaska (circle 4 in the exhibit).

*"Programmed" refers to actions which are currently scheduled and which (funds permitting) will be accomplished within a specified period.

**"Quasi-public" refers to nonprofit groups such as the Lions Club or the Motor Musers Association.

THE RECREATION PLANNING FORMULA



Next, the two basic blocks of data, supply and demand, were compared, and standards were developed (circle 5) which made it possible to convert the demand and supply information to uniform units, in order to identify present and projected needs (circle 6) or deficiencies, and to estimate the costs associated with satisfying those needs.

To ensure the development of a coordinated and efficient program for meeting the needs identified, it then became important to evaluate and define the roadblocks or major issues affecting outdoor recreation in Alaska (circle 7). From the definition of needs for areas and facilities, together with identification of needed policies and programs, the comprehensive action plan was developed (circle 8). This plan is intended to meet the objective, stated earlier, of developing a creative action program. Thus, the identification of supply, demand, needs and required policies provides the framework for implementing a practical, action-oriented outdoor recreation plan for Alaska.

PLANNING PROCESS

Preparing and implementing this plan involved six basic steps:

- Orientation and project planning
- Analysis of existing data
- Collection of technical data
- Research and interviews
- Analysis and preparation of the plan
- Implementation.

Each of these steps is described below.

Step 1: Orientation And Project Planning

As a first step, materials were collected and reviewed to acquaint the planners with the then current plan developed by the State, and the planning activities and techniques of other states and groups working in the field of outdoor recreation. From this research a project plan was developed to serve as a guide in collecting, interpreting and documenting reliable information about Alaska's present and future outdoor recreation needs. The final step in this orientation phase was to send an introductory letter to key

figures knowledgeable about recreation in Alaska, requesting assistance and encouraging their participation in the process of preparing Alaska's Outdoor Recreation Plan.

Step 2: Analysis Of Existing Data

The second step involved a thorough review and analysis of the materials which had been developed for previous plans, as well as data developed specifically for the new plan. An earlier inventory of supply was reviewed, as were previous resident and nonresident surveys. From the analysis came an identification of the areas in which further field work and research were required to provide needed data for the revised plan.

Step 3: Collection Of Technical Data

Over the course of approximately 10 months, additional information identified as needed in the analysis discussed above was collected and processed.

- Additional in-person interviews were conducted with residents in two key geographic areas.
- Interviews and mail-back questionnaires were provided by non-resident visitors.
- Computer programs were developed to tabulate and analyze the resident and nonresident information. From these programs, information was derived concerning the nature and volume of demands, the relationship of demand to various socioeconomic characteristics (such as age, income and profession), and the statistical significance* of the data.

*"Statistical significance" is a technical term referring to the confidence with which one can use sample data to make various comparisons and inferences concerning the population as a whole. As would be expected, somewhat arbitrary decisions have to be made about the significance of a given statistic, or a discrepancy between statistics. However, certain guidelines are generally adopted by statisticians. In this plan, the Task Force has used the same statistical guidelines as were used by the Bureau of Outdoor Recreation for its 1965 nationwide demand study.

- An inventory of major public and private outdoor recreation areas and facilities in Alaska was assembled and computer-processed to form the basis for a data bank* of inventory information which can be periodically updated in the future as the State desires.
- Adjacent Canadian areas were also visited to obtain information about the programs, resources and facilities for outdoor recreation in these areas.
- Information was obtained from Federal, State, local and quasi-public agencies which defined their outdoor recreation responsibilities and explained their recreation programs.

Step 4: Research And Interviews

The fourth step involved collecting qualitative data - the ideas and suggestions which help to supplement quantitative data by providing information which does not come in the form of numbers. Research and interviews provided important subjective information about needed policies, problem areas, ideas and opinions regarding the environment for outdoor recreation in Alaska. Over the course of the project, discussions were held with representatives of key recreation agencies in the State, owners and managers of private enterprises, and political leaders. In addition, published data on Alaska and public outdoor recreation were studied to add further depth to the plan. The Planning Task Force received excellent cooperation from everyone contacted, and has listed selected sources in a bibliography included in the separate volume of Appendixes.

Step 5: Analysis And Preparation Of The Plan

All the data were then reviewed and interpreted. In this phase, the planners merged the qualitative and quantitative information, identified issues and special needs relating to recreation, and considered alternative solutions and approaches. Drafts of chapters were then prepared by the planners and later reviewed by recreation specialists in Alaska, members of the Alaska Outdoor Recreation Council, and representatives of the Bureau of Outdoor Recreation. On the basis of this review, the drafts were refined until the final plan was prepared.

*"Data bank" refers to information stored in a computer which is available for various kinds of processing, such as tabulating or cross-referencing.

Step 6: Implementation

The process of translating the plan into action is the sixth step in outdoor recreation planning. At this stage, representatives of the State will be working together to install the programs and take the courses of action identified. Because their actions will result in additional changes, and because unforeseen events affecting outdoor recreation are certain to occur over the next few years, the implementation process will form the groundwork for the continuing efforts to revise and update the State's comprehensive Outdoor Recreation Plan.

PARTICIPANTS IN THE PLANNING PROCESS

As implied by the description of the six steps in the planning process and by the size of this plan, many groups and individuals have made substantial contributions to the project; this participation has been strongly encouraged by the planners as a means of improving the quality of the final document, making it a more comprehensive volume with a practical action program. It is hoped that this participation will also help to ensure successful implementation, encouraged and supported by those who helped design the plan itself.

The major participants and their contributions are described briefly below.

Planning Task Force

Basic responsibility for preparing Alaska's Outdoor Recreation Plan was assumed by a Planning Task Force, composed of outside consultants plus the Chief and an Assistant Recreation Planner from the State's Parks and Recreation Section. The role of the Planning Task Force was seen as that of a catalyst, bringing together ideas and information from many sources, analyzing this material, and then presenting it in such a way that the key public and private recreation agencies could coordinate their programs toward attainment of an overall plan. With assistance from the agencies and representatives listed below, the Planning Task Force established the methodology used to develop the plan, collected and evaluated the information, and drafted this document.

As indicated earlier, the Planning Task Force sent an introductory letter, at an early stage in the project, to members of the Alaska Outdoor Recreation Council and to key representatives of other public and private outdoor recreation interests. The response to this letter provided a number of ideas and opinions regarding the key issues raised in the letter, and the letter itself also helped to open the door to those who were subsequently interviewed.

While the Planning Task Force is sincerely grateful for the substantial assistance provided by many individuals and groups, it, of course, accepts responsibility for all statements made in the plan.

Alaska Outdoor Recreation Council

The Alaska Outdoor Recreation Council (AORC) as a group played a key role in the planning process through its assistance in developing the standards for the plan. Individual members of the Council were also helpful, participating in seminars which reviewed the major policy issues concerning recreation in Alaska. Finally, the Council as a body reviewed a completed draft of this plan.

Executive Committee Of The Alaska Outdoor Recreation Council

The Executive Committee of the AORC was an important participant in the planning process. The Committee not only evaluated the approach and methodology adopted by the Planning Task Force but later reviewed the completed plan and recommended that the document be accepted as the State's official plan.

Federal, State And Local Agencies

Representatives of key government and nongovernment agencies also played an important part by providing needed data regarding the policies and programs of their agencies in Alaska.

Alaska's Division Of Data Processing

Members of the Division of Data Processing assisted through translating the conceptual design* prepared by the consultants into operational computer programs which tabulated and stored much of the information collected during the survey.

*"Conceptual design," as used here, refers to the basic approach and techniques suggested by the planners for the use of computers to code, tabulate and analyze the quantitative demand and supply information collected for the plan. The conceptual design was used by personnel of the State's Division of Data Processing to prepare the required computer programs.

United States Bureau Of Outdoor Recreation

The Bureau of Outdoor Recreation assisted through meetings with various people and agencies involved in the planning process, and through informal review of drafts. Representatives of the Bureau attended meetings of the Alaska Outdoor Recreation Council and of the AORC Executive Committee, in a nonvoting capacity. The preparation of this plan was financed in part through a planning grant from the Bureau, under the provisions of the Land and Water Conservation Fund Act of 1965 (Public Law 88-578).

PLANNING REGIONS

The Bureau of Outdoor Recreation has strongly encouraged all States to prepare outdoor recreation programs on a regional basis, dividing up the larger areas into smaller, more manageable units so that needs can be pinpointed and coordination facilitated.

In Alaska, with its vast size and wide variations between localities, a regional approach to recreation planning becomes all the more important, since the demands, supplies and programs in one area of the State are frequently quite different from those in other areas.

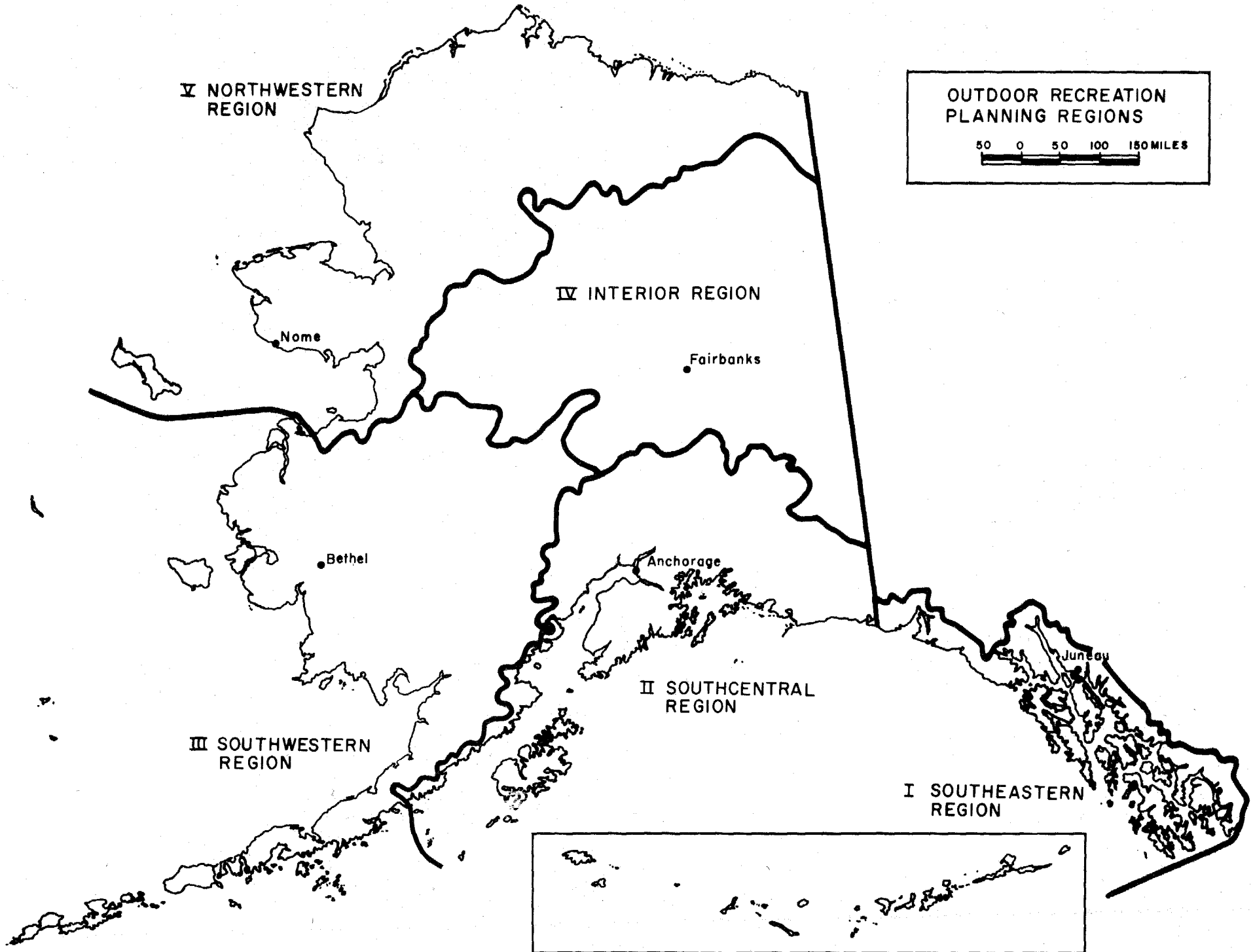
When Alaska's original Outdoor Recreation Plan was prepared in 1965 and revised in 1966, comprehensive planning regions had not yet been defined for the State. As a result, the developers of the earlier plans reviewed alternative geographical breakdowns and selected one developed in 1963 by George Rogers and Richard Cooley in their study, "Alaska's Population And Economy." This breakdown divides the State into five regions which are, in turn, composed of the State's 24 constitutionally defined former election districts, which are now used as census districts.

While this current document was being prepared, the Planning and Research Division of the Governor's Office was in the process of evaluating alternative regional definitions for Statewide comprehensive planning purposes. Because these regions were not finalized in time for use in the current plan, the breakdown used in the two previous plans was retained, with one minor revision (shifting all land north of the Brooks Range into the Northwestern Region). This revision is expected to make it easier to convert at a later date to the planning regions adopted by the State.

This approach, which allows for general comparability of data between the old plans and the new, was subsequently reviewed and approved by the AORC Executive Committee and the Division of Planning and Research. In addition, the demand and supply data developed for this plan have been

collected and identified with sufficient detail concerning location to facilitate future conversion to the State's finalized planning regions.

The five regions used for this plan are shown in Exhibit II-2, on the following page.



Chapter III

DESCRIPTION OF ALASKA



Hiking in Mt. McKinley National Park

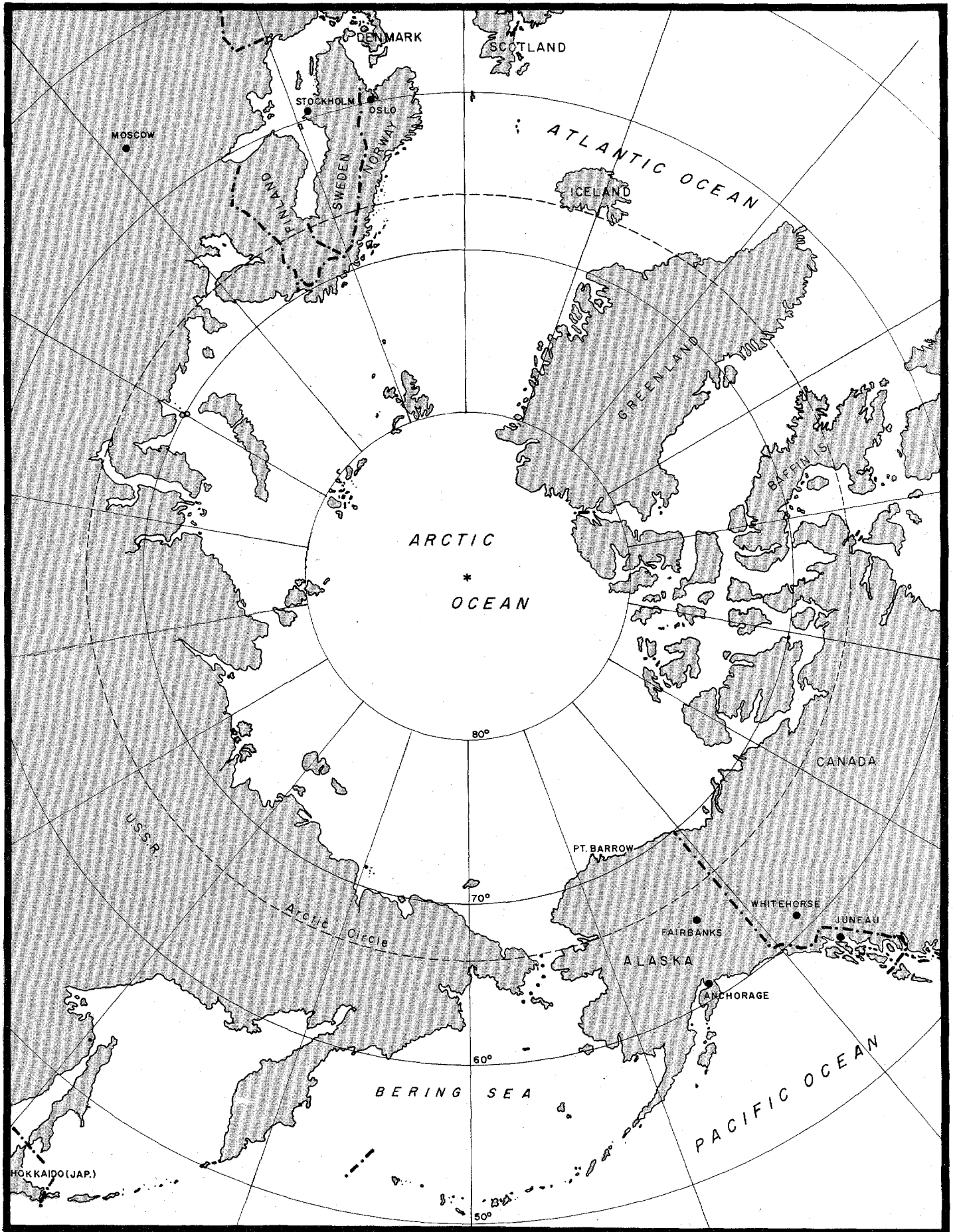
III - DESCRIPTION OF ALASKA

This chapter reviews certain facets of Alaska's history, population, economy and government which bear upon the matter of outdoor recreation and tourism in general. Detailed discussion of the State's geography and topography is included in Chapter IV, as part of the discussion of existing recreation resources. After a brief overview of the State and its people, in the paragraphs immediately below, this chapter is divided into the following sections:

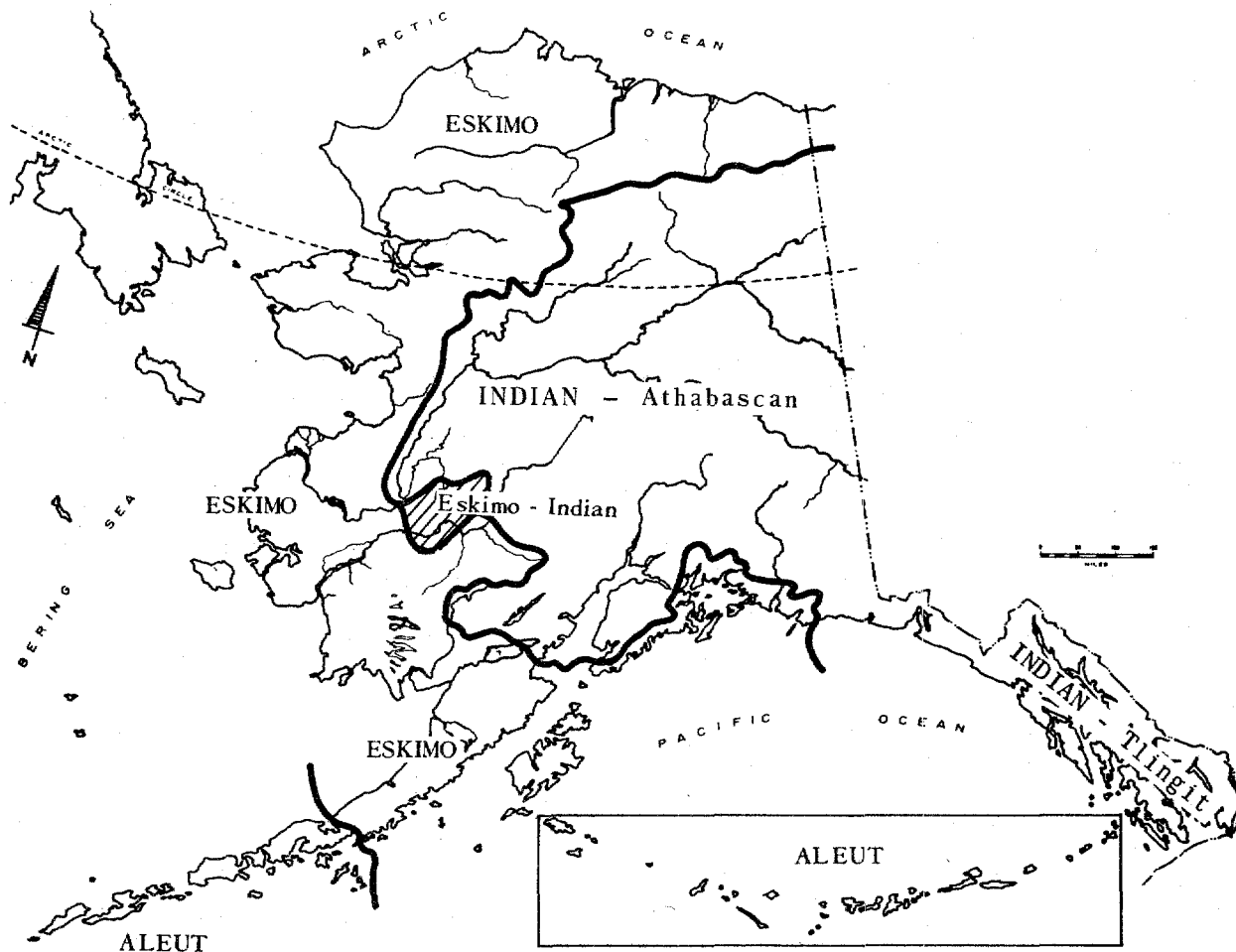
- A - History - which traces the history of settlement in Alaska from aboriginal times to the present.
- B - Population - which describes the important characteristics of Alaska's population.
- C - Economy - which provides a brief background on economic activity in the State.
- D - Government - which describes the framework of government in the State.
- E - Land Ownership - which reviews the amounts of land in Alaska owned by the Federal Government, the State, local government, and private persons.

The Alaska subcontinent, once the migration route for the first Americans and now a major air crossroads of the world, occupies a strategic place on Earth, as illustrated by Exhibit III-1, on the following page. Although the first Americans set foot somewhere in western Alaska between 20,000 and 40,000 years ago, Alaska is still "the last frontier" of the New World - one of the few areas still largely untouched by civilization. Moreover, it possesses a unique diversity and vastness of natural terrain, huge reservoirs of untapped resources, and an unusual climate.

The physical body of land called Alaska is one-fifth the size of the continental United States. Its broad boundaries extend far into the Northern and Western Pacific. Point Barrow is the northernmost point on the North American mainland, only 1,250 miles from the North Pole. The Aleutian Islands of Southwestern Alaska extend across the Pacific Ocean to a point within 1,000 miles



GENERALIZED GEOGRAPHIC DISTRIBUTION OF ESKIMOS, INDIANS, AND ALEUTS IN ALASKA



Source: Federal Field Committee for Development Planning in Alaska.

of the coast of Japan. In Northwestern Alaska, Little Diomedede Island in the Bering Strait is a scant two miles from Soviet Russia's Big Diomedede Island. Yet Southeastern Alaska, adjacent to Canada's British Columbia, is at its southernmost point only 650 miles from the State of Washington.

Within this vast area reside 55,000 Eskimos, Aleuts, and Athabascan, Tlingit, Haida, Tsimshian and Eyak Indians, who subsist by hunting and fishing in much the same manner as did their ancestors. By contrast, most of the 33,000 military personnel and 197,000 other residents of the State live in the metropolitan areas. Thus, two sharply diverse cultures are to be found within the State's boundaries.

A - HISTORY

This section briefly reviews Alaska's history from early times to the present.

The subcontinent of Alaska is generally thought to have been the migration route for the first humans reaching North America. Today, the settlements along these same hills and valleys are occupied by Athabascan Indians, descendants of these early migrants.

To the south, Tlingit and Haida Indians settled along the shores and fiords of Southeastern Alaska. In the west, Eskimos and Aleuts occupied the treeless southwestern and northwestern coasts of Alaska. These groups still occupy essentially the same areas as their ancestors, as illustrated in Exhibit III-2, on the following page.

DISCOVERY AND EXPLORATION

Russian eastward expansion in search of fur-bearing animals culminated in 1728 when Vitus Bering, a Dane sailing under the Russian flag, discovered St. Lawrence Island in what is now Alaska's Bering Sea. A second expedition in 1741 brought Bering closer to Alaska's mainland, where he discovered and named Mount St. Elias in South Central Alaska. Later in the voyage, the first recorded contact between Europeans and Alaska's aboriginal inhabitants occurred in the Shumagin Islands off the Alaska Peninsula. Thus began a long history of exploration in Alaska.

News of the existence of valuable furs in newly discovered lands east of Siberia encouraged Russian fur hunters to launch commercial expeditions to Alaska. This group settled in the Aleutian Islands and pushed eastward to the mainland, brutally exploiting the indigenous population and hunting the sea otter almost to extinction.

In the early 1770's, Spanish explorers sailed the coast off Southeastern and South Central Alaska, and eventually claimed it as an extension of their California possessions. In 1778, Captain James Cook, the famous English navigator, completed a detailed mapping of the Alaskan coast, opening the way for further sea exploration.

Also in 1778, Russia, after much conflict with the Spanish, English and French, claimed a right to exclusive control of all occupied Alaskan regions. In 1799, the Russian-American Company was formed, and from this date until the sale of Alaska to the United States 68 years later, the Company governed all activities of the region.

During the early years of the 19th century, Russians explored and mapped much of the coast and interior of Alaska. At the same time, Hudson Bay Company fur traders were gradually moving westward, and in 1847 built Fort Yukon at the junction of the Porcupine and Yukon Rivers, thereby controlling all fur trading activities in the upper Yukon Basin and contributing to the decline of Russian domination of Alaska.

AMERICAN PURCHASE AND DEVELOPMENT

Russia's defeat in the Crimean War in 1856, combined with increasing inroads by British and American fur traders and whalers, weakened Russia's control over Alaska. In addition, financial problems were experienced by the Russian-American Company, and Russia began to fear that adequate protection could not be provided for any future American colonies. These factors led eventually to the sale of Alaska to the United States in 1867. Secretary of State William H. Seward negotiated Alaska's purchase for a price of \$7,200,000 - less than two cents an acre. Once called "Seward's Folly," this purchase has proved to be one of the nation's wisest investments.

Gold was first discovered by the Russians during their occupation of Alaska, but they discouraged its extraction to prevent damage to their lucrative fur trade. However, these finds lured the first prospectors to the Northland, and in 1880 Joseph Juneau and a friend discovered gold near what is now Juneau, Alaska. With the discovery of gold in Canada's Klondike in 1896 the rush was on, and by the turn of the century discoveries were made in Nome and the Tanana Valley of Alaska.

Alaska's population swelled as prospectors and opportunists came North to seek their fortune. Within 10 years, however, the gold fever had subsided and the flow of settlers was reduced.

Prior to 1912, the system of government and jurisprudence in Alaska was very fragmentary. Pressures from dissatisfied Alaskans resulted in Congressional establishment of a territorial form of government, although somewhat limited in its authority.

The first legislature met in 1913 and began to erect the structure of territorial government, and the Congress authorized construction of the Alaska Railroad in 1914. A statehood bill was introduced by James Wickersham in 1916. The Matanuska Valley farm project was developed in the 1930's, and several military bases were built during World War II after the Japanese occupation of the Western Aleutian Islands. During these times, and later during the Korean War, Alaska's population grew substantially, as is described in the next section of this chapter.

In 1957, oil was discovered in the Kenai Peninsula, opening the way to further mineral exploration and to an industry which may prove to be the most important element of Alaska's economy.

On January 3, 1959, Alaska became the 49th State.

ALASKA'S POPULATION GROWTH
Selected Years, 1840 Through 1966

<u>Year</u>	<u>Eskimos Indians, Etc.</u>	<u>Other Civilians</u>	<u>Military Personnel</u>	<u>Total</u>
1840(a)	40,076	700	-	40,776
1880	32,996	430	-	33,426
1890	25,354	4,298	-	29,652
1900	29,542	30,450	-	59,992
1910	25,331	36,400	-	61,731
1920	26,558	28,228	250	55,036
1930	29,983	29,045	250	59,278
1940	32,458	39,566	500	72,524
1950	33,863	74,373	20,407	128,643
1960	43,081	150,394	32,692	226,167
1966	50,700	187,600	33,200	271,500
1968	55,350	196,530	33,000	284,880

(a) Estimated from the best available data.

Sources: Census Of Population: 1960, Volume I, Part 3,
U. S. Bureau of the Census; Alaska Department of Labor;
Official Statement of the State Bond Committee of the
State of Alaska, April 30, 1969, Airport Bond Prospectus.

B - POPULATION

This section discusses Alaska's population growth, its geographic distribution and composition, and other significant characteristics.

GROWTH

As shown by Exhibit III-3, following, Alaska's population has grown sporadically, increasing rapidly during some periods but decreasing at other times. The first great influx of people into Alaska occurred during the gold rush at the turn of the century. During the 10-year period from 1890 to 1900, the total population doubled, with a sevenfold increase in the nonindigenous population.

The next great influence on Alaska's population growth stemmed from the Japanese invasion of the Western Aleutian Islands in World War II. At this time, Alaska's strategic importance was recognized, and several military bases were established. At the peak of the war, more than 150,000 troops were stationed in Alaska, many of whom returned to reside in the State after the war. Over the decade from 1940 to 1950, the State's population increased 77 per cent, a growth rate greater than that of any other state or territory over the same period.

From 1950 to 1960 this growth continued, with a 75.8 per cent increase as a result of both natural increase and net migration stimulated by the Korean War. With further development of the Alaskan economy over the most recent nine years, the State's population continues to grow, but at a more moderate rate, and totaled 285,000 in July 1968, an increase of approximately 26 per cent over 1960. This growth is expected to continue, reaching 565,000 by the year 2000 according to a prediction by the Bureau of the Census.

DISTRIBUTION AND COMPOSITION

A significant characteristic of Alaska's population is its sparseness relative to the total land area: Alaska has a ratio of 0.49 persons per square mile, versus 68 persons per square mile for the United States as a whole. At the same time, there is wide variation in population by region of the State, as shown by the table on the next page of text (1966 data are used, because they are the most recent data giving the complete regional breakdown):

<u>Region</u>	<u>1966 Population</u>			<u>Total</u>
	<u>Eskimos, Indians, Etc.</u>	<u>Other Civilians</u>	<u>Military Personnel</u>	
Southeastern	9,900	32,200	700	42,800
South Central	7,300	112,200	17,100	136,600
Southwestern	17,800	6,100	4,100	28,000
Interior	5,200	35,300	10,600	51,100
Northwestern	<u>10,500</u>	<u>1,800</u>	<u>700</u>	<u>13,000</u>
Total	50,700	187,600	33,200	271,500

South Central Alaska contains more than half the State's total population, with the majority residing in the Anchorage area. Interior Alaska (which contains Fairbanks) and South Central Alaska, taken together, hold almost 70 per cent of the State's residents. Thus, approximately one-half of the State's population lives and works in the urban environment of Alaska's two largest cities.

Most of the rest of the State's population (with the exception of those in the smaller cities of Southeastern Alaska) resides in the approximately 170 bush communities of less than 1,000 people. Of this bush population, more than half are Eskimos, Indians and Aleuts.

OTHER CHARACTERISTICS

Generalizations about Alaska's population are difficult because of the great diversity of Alaska's people. However, the following information will give a rough idea of the State's population characteristics.

In 1960, the median age of Alaskans was 23.3 years, which is six years below the national figure. At the same time, the educational level of Alaskans was higher than that in most western states, with median school years completed amounting to 12.1 years. Per capita income, in 1967, was \$3,629, well above the national average of \$3,137 and putting Alaska sixth among the 50 states.

C - ECONOMY

This section discusses present economic activity within Alaska, with special attention to the development of resources, tourism, and transportation.

GENERAL CHARACTER OF BUSINESS ACTIVITY

Economic activity in Alaska is as diverse as its people, topography and climate. There are, however, five characteristics which describe the general nature of business activity in the State: seasonal employment, extensive government influence, high prices, dichotomous economic base, and rapid growth.

Seasonal Employment

There is significant fluctuation in the employment rate due to seasonal factors. This pattern is found throughout the State, with comparatively stable employment in urban communities and wide swings in bush communities. For example, in Anchorage, where private employment is mostly dependent upon services, trade, and contract construction, unemployment fluctuated between 7.8 and 4.6 per cent in 1965. By contrast, in the bush community of Bethel, which depends primarily upon commercial fishing, the unemployment rate ranged between a phenomenal 47.9 and 15.7 per cent.

Extensive Government Influence

Historically, Alaska's economy has relied heavily upon governmental expenditures, and continues to do so, although to a slowly diminishing extent. In 1950, government agencies (Federal, State, local and military) employed 63 per cent of Alaska's work force and generated 50 per cent of the State's personal income. In 1965, these agencies employed 56 per cent of the work force and accounted for nearly 45 per cent of the State's personal income.

High Prices

Another significant characteristic of the Alaskan economy is its structure of high prices and costs. The primary causes, according to the late Leo M. Loll of the University of Alaska, are the climatic conditions and Alaska's distance from traditional sources of supply. As an illustration, the table below gives indexes, based on 1967 data, of the cost of goods and services in four Alaskan cities compared with Seattle:

<u>City</u>	<u>Cost Index</u> <u>(Cost In Seattle = 100)</u>
Anchorage	121
Fairbanks	132
Juneau	127
Ketchikan	118

Source: U. S. Department of Labor,
Bureau of Labor Statistics

Dichotomous Economic Base

Alaska's economic base can be separated into two distinctly different economies. The majority of Alaskans participate in a money economy (an economy where dollars are earned to purchase necessary goods and services) exactly the same as that found in the balance of the United States. However, a sizable number of Alaskans in bush communities engage in a subsistence economy (an economy involving little use of money, where the primary work activity is related to the procurement of food and shelter) similar to that followed by their ancestors. While this dichotomy is very apparent, the subsistence economy is largely confined to the small bush communities of Alaska where there is little or no industrial or governmental economic base.

Rapid Growth

Since 1959, when Alaska became a State, the economy has grown substantially. Recent oil discoveries and expansion of the fishing and forestry industries have contributed to this growth. These industries are discussed further in the paragraphs below.

RESOURCE DEVELOPMENT

Exhibit III-4, following, indicates the aggregate value of resource production over the period from 1959 through 1967.

Petroleum And Natural Gas

The emergence of the oil industry in Alaska promises to become perhaps the most significant element in its economy in the near term. As a measure of its importance, more than \$1 billion has been invested in oil exploration and development since 1957. The most significant discovery to date is the huge reserve in the North Slope of the Brooks Mountain Range above the

VALUE OF RESOURCE PRODUCTION

1959 Through 1967

(Thousands Of Dollars)

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Fisheries	\$ 72,203	\$ 96,489	\$128,726	\$131,938	\$109,038	\$140,941	\$166,210	\$197,299	\$126,696
Forest Products	36,748	47,290	44,650	49,683	53,400	59,463	65,730	73,000	77,700
Petroleum	-	1,260	17,776	31,657	33,761	35,490	35,872	46,801	95,455
Minerals	20,495	20,602	16,957	22,539	34,079	30,601	47,583	35,882	41,692
Agriculture	5,200	5,406	5,500	5,827	5,478	5,575	5,386	5,200	5,524
Furs	<u>3,564</u>	<u>4,512</u>	<u>4,500</u>	<u>7,955</u>	<u>6,446</u>	<u>6,500</u>	<u>6,058</u>	<u>6,900</u>	<u>6,500</u>
Total	\$138,210	\$175,559	\$218,109	\$249,599	\$242,202	\$278,570	\$326,839	\$365,082	\$353,567

Source: Official Statement of the State Bond Committee of the State of Alaska,
April 30, 1969, Airport Bond Prospectus.

Arctic Circle. This find may well prove to be the largest reserve yet discovered on the North American continent, with an estimated potential of 5 to 10 billion barrels. Construction is currently under way on a \$900 million pipeline, from Prudhoe Bay to Valdez, which will eventually have a capacity of more than 2 million barrels a day.

Present production from wells already developed has also grown significantly, as indicated by the increase from 54,000 barrels to 200,000 barrels per day over the period January 1966 through July 1967. Alaska currently ranks eighth in the United States in oil production, and first in production per well.

Natural gas production has also shown rapid growth, as measured by the increased value of output from \$30,000 in 1960 to \$7.3 million in 1967. The seven known gas fields located southwest of Anchorage in the Kenai Cook Inlet area have total reserves estimated at 4.5 trillion cubic feet.

Fisheries

Fishing has been Alaska's most valuable industry, despite its somewhat cyclical nature, until the recent expansion of the petroleum industry to a level nearly equaling the importance of fishing. In order of importance, the four largest components of the fishing industry are the catches of salmon, king crab, halibut, and shrimp. Other fish and shellfish caught in Alaskan waters are Dungeness crab, oysters, clams, abalone, and herring. In recent years the market value of fish caught in Alaskan waters has exceeded that of any other state (\$126.7 million in 1967, after the worst commercial salmon fishing season since 1899). Total investment in fishing vessels and facilities now approaches \$1 billion.

Forestry

Of Alaska's 120 million acres of forest lands, 23 per cent are considered capable of being commercially developed. These forests are found primarily in the coastal region of Southeastern and South Central Alaska, although commercial timber is also found in other parts of the State. There are two pulp mills in the State, located in Southeastern Alaska, one of which is Japanese-owned. Together they generate approximately \$60 million annually. In addition, sawmills for processing finished lumber are located in Ketchikan, Wrangell, Haines, Petersburg, Seward, Anchorage and Fairbanks. Over the period 1959 through 1967, timber production increased from 274 million to 569 million board feet, with an aggregate value of \$37 million and \$77 million, respectively.

Other Minerals

Alaska has immense mineral wealth, and contains deposits of nearly all metals classified as strategic and critical by the Federal Government. Despite this abundance, the growth of the mineral industry (exclusive of petroleum and natural gas) has been fairly slow. In 1960, the value of mineral production was \$20.6 million; seven years later, production had grown only 5 per cent.

At present, the principal barrier to more extensive development is Alaska's high cost structure. As evidenced by the recent development of the petroleum industry in Alaska, resource discoveries must be extremely large to justify the huge capital investment required for their extraction. Other barriers to development include the short working season dictated by climatic conditions, the rough terrain, and the distances involved. However, the recent discovery and development of rich copper ore deposits in the Kobuk area above the Arctic Circle (and of oil on the North Slope) illustrate the effect of finding a mineral in sufficient quantity to overcome these obstacles.

Agriculture

The value of agricultural production in the State over the last 10 years has reached a plateau, at about \$5 million per year. Nearly half of this total came from the production of milk and eggs, one-fourth from grain, hay, and silage, and the balance from meat and vegetables. Farms are located primarily in the Matanuska Valley near Anchorage and the Tanana Valley near Fairbanks. On the other hand, ranches (mostly cattle and sheep) are located on the Kenai Peninsula, Kodiak Island, and in the Aleutian Islands. A measure of the current underutilization of available farm lands is the fact that only 0.5 per cent of the 800,000 available tillable acres are planted in crops.

Furs And Wildlife

The role of furs and wildlife in the State's economy is difficult to measure. Furs commercially harvested were valued at \$6.5 million in 1967. In addition, however, the quantity and diversity of Alaska's wildlife constitute a major tourist attraction, the value of which cannot be adequately quantified. Finally, furs and wildlife are the basis of the hunting and fishing subsistence economy of many Alaskans living in bush communities, and this factor also cannot easily be given an economic value.

TOURISM

The tourist industry is steadily growing in economic importance to Alaska. One measure is the dollars spent by tourists while in the State. In 1964, this figure was \$18.2 million, far below the \$181 million spent by tourists in the nearby State of Washington (a chart showing the distribution of these expenditures is presented in Exhibit III-5). Three years later, however, tourist expenditures had risen 50 per cent to \$29 million because of the 45 per cent increase in the number of tourists visiting the State (estimated at 86,700 in 1967).

Other indicators of the significance of tourism to the Alaskan economy are the number of persons employed and the income generated. In 1967, 1,650 persons (up from 1,100 in 1964) were employed in positions directly related to tourism - providing lodging, food, transportation, merchandise, guiding and miscellaneous tourist services. Primary wages received from these services were \$10.9 million, an increase of 47 per cent over 1964 and an increase second only to oil and gas wage income.

Despite this outstanding growth in employment, income and tourist expenditures, there exists even greater opportunity for the development of this industry. Alaska's spectacular scenery, wildlife, unique cultural aspects, and recreational potential are the prime attractions underlying the expected expansion. As part of a program to develop this potential, the State of Alaska is currently spending more than \$600,000 annually on the promotion of tourist attractions. In addition, much long-range planning is being undertaken by public and private agencies to aid in the future development of this very important industry.

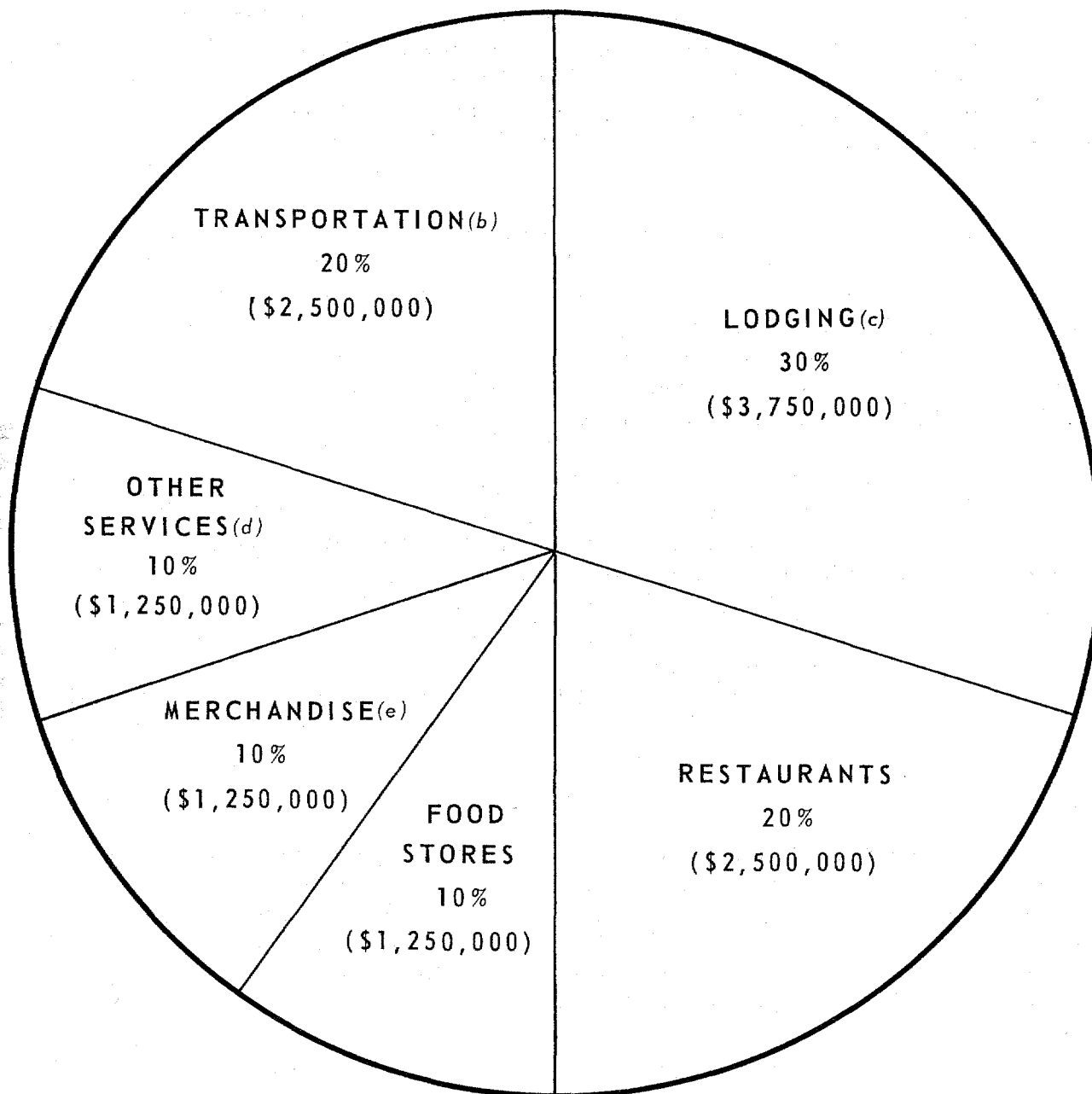
TRANSPORTATION

Transportation is perhaps the key industry in Alaska, not only for the numbers employed (6,000 in 1967) or the direct contribution to the economy (\$50 million in 1967) but also for the urgent need to move goods and people to and within the State. The distances involved are immense; for example, from Seattle to Anchorage is 1,450 miles, from Ketchikan to Pt. Barrow is 1,350 miles, and from Anchorage to Fairbanks is 360 miles.

As a result of these great distances, Alaska relies heavily upon air transportation. The State currently ranks first among states on a per capita basis in numbers of pilots, planes, passengers flown, and cargo tonnage carried. The air transportation network consists of 13 intrastate, interstate and international carriers, in addition to more than 150 air taxi services.

DISTRIBUTION OF TOURIST EXPENDITURES^(a)

1964



(a) Exclusive of more than \$5 million in tourist hunting and fishing expenditures.

(b) Exclusive of expenditures for transportation to and from Alaska.

(c) Includes purchase of food and beverage service at lodging places.

(d) Laundry and other personal services.

(e) Handicrafts, clothing and related items.

Marine transportation also plays an important role in the State's economy. The State's year-round ferry system operates throughout Southeastern Alaska, from Prince Rupert in British Columbia to Haines above Juneau. In 1967, it is estimated that 22 per cent of all tourists traveled to Alaska by the ferry system. Ferry service is also available in the South Central area between Kodiak, Cordova, Valdez, Seward, Homer, Seldovia and Whittier. In addition, other water carriers provide freight and passenger service to Alaskan ports from the West Coast. One of Alaska's two rail lines is the Federally owned Alaska Railroad, which connects the ports of Anchorage, Whittier and Seward with Fairbanks, a total distance of about 470 miles; western extension of these lines is currently under study. The narrow-gauge White Pass and Yukon Railroad in Southeastern Alaska is the State's second railroad; it carries passengers and freight over the 110-mile run between Skagway and Whitehorse in Canada's Yukon Territory.

The last component of Alaska's transportation system is the highway network. Connecting paved roads extend from the Canadian border in the east to Fairbanks in the north and Valdez, Seward and Homer in the south, for a total of 2,778 miles. Secondary roads total an additional 3,809 miles. This highway network is concentrated in the South Central and Interior Regions.

In addition to providing income, employment and mobility for the State's economy, the transportation industry directly affects the State's price structure. Since most goods are shipped to Alaska from outside, transportation costs directly influence wholesale and retail prices. While recent innovations in freight handling, routing, containerization and bulk shipping have tended to diminish this influence, transportation costs remain an important part of the price structure in Alaska.

D - GOVERNMENT

The following brief description of the various levels of government in Alaska and their functions constitutes a background for the section in Chapter IV which reviews the agencies concerned with outdoor recreation resources and programs.

FEDERAL GOVERNMENT

Since the purchase of Alaska in 1867, the Federal Government has been the most prominent governmental influence in Alaska, largely because of the vast public domain for which it is responsible. Recognition of the value of Alaska's strategic location, its natural resources, and the needs of its population has resulted in a variety of Federal programs and operations involving a civilian work force of more than 14,000 as of December 1967.

The importance to Alaska of Federal programs and operations is reflected in the following table, which shows the number of civil servants involved as of December 1967, by broad category:

<u>Federal Category</u>	<u>Number Of Employees</u>
Legislative Branch	5
Judiciary Branch	25
Post Office	921
Armed Services	6,308
Agriculture	407
Health, Education and Welfare	1,331
Treasury	111
Interior	1,968
Transportation	2,638
Justice	59
Commerce	224
Housing and Urban Development	31
Labor	6
Veterans	31
General Services	75
Selective Service	11
Small Business	92
Civil Service	21
All Other	<u>30</u>
Total	14,294

In addition to the civilian work force noted above, approximately 33,000 military personnel (excluding dependents) are stationed in Alaska.

Two Federal Departments have agencies with major responsibilities for parks and recreation. In the Department of the Interior, now headed by Alaska's former governor, Walter J. Hickel, are the National Park Service, the Fish and Wildlife Service, the Bureau of Land Management, and the Bureau of Outdoor Recreation (although the last-named has no full-time personnel based in Alaska). The United States Forest Service is in the Department of Agriculture.

STATE GOVERNMENT

State government, established in 1959, is based on a constitution which is considered by many to be a model document.

Organization

The organizational structure provided by the State Constitution is depicted in Exhibit III-6, following. There are three basic branches: legislative, judicial and executive. The Governor and Secretary of State are the only elected executive officials, serving terms of four years, with the Governor limited to no more than two consecutive terms.

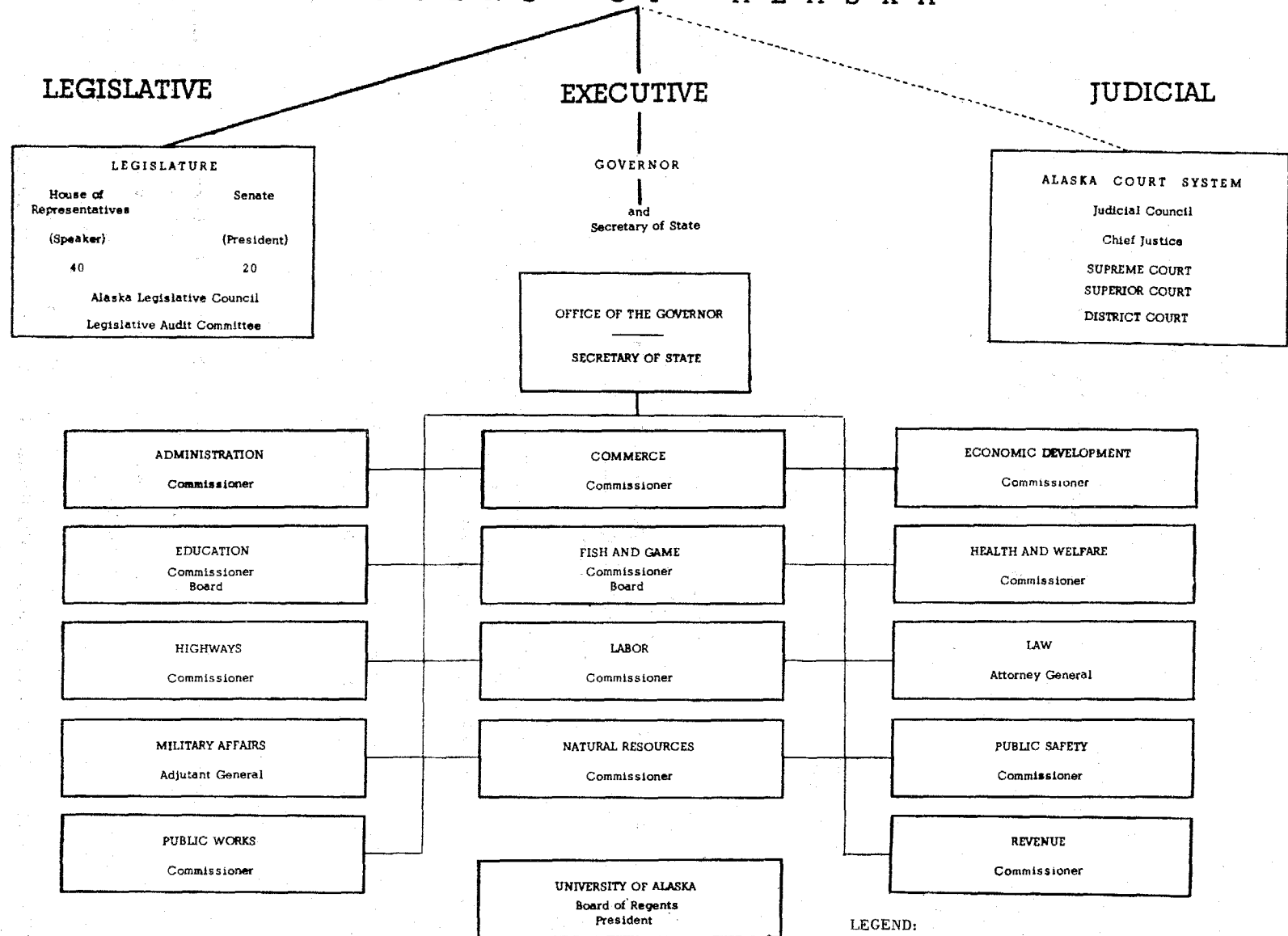
Day-to-day operations are the direct responsibility of the Governor, under whom are 14 executive departments. Each department head is appointed by the Governor, and serves at his pleasure, subject to confirmation by the Legislature.

As of 1967, there were 57 divisions within these 14 departments. In addition, the executive branch is supported by 35 boards, 17 commissions, 7 councils, and 4 committees, as listed in Exhibit III-7. The Alaska Outdoor Recreation Council has not yet achieved official recognition, and therefore is not included in this list.

The Legislature is composed of a House of Representatives, containing 40 members elected for two-year terms, and a Senate of 20 members serving four-year terms. Half of the Senate stands for election every even-numbered year. The main work of the Legislature is accomplished through the following committees: Commerce; Finance; Health, Education and Welfare; Judiciary; Labor and Management; Local Government; Resources; Rules; and State Affairs. These committees are complemented by two interim committees: a Legislative Council, with 10 members, five from each house, which works

ALASKA STATE GOVERNMENT:
BRANCHES AND EXECUTIVE DEPARTMENTS

V O T E R S O F A L A S K A



LEGEND:

- Elected by popular vote (includes Secretary of State elected on same ticket as Governor).
- - - Justice and judges of Supreme and Superior courts nominated by Judicial Council, selected by Governor, and thereafter subject to voter approval.
- Department heads appointed by Governor and confirmed by Legislature.

**ALASKA STATE GOVERNMENT:
BOARDS, COMMISSIONS AND COUNCILS IN THE
EXECUTIVE BRANCH AS PROVIDED BY LAW**

BOARDS, COMMISSIONS, AND COUNCILS IN THE
EXECUTIVE BRANCH AS PROVIDED BY LAW

OTHERS - EXISTING UNDER OTHER
THAN STATUTORY AUTHORITY

OFFICE OF THE GOVERNOR

- Alaska Commission on the Status of Women
- * Alaska International Development Commission
- # Alaska Native Commission
- * Alaska Safety Council
- ** Commission for Ocean Advancement Through Science and Technology (COAST) /1
- Alaska State Council on the Arts
- Athletic Commission
- # Commission for Northern Operations of Rail Transportation and Highways
- Governor's Committee on Employment of the Physically Handicapped
- ** Governor's Planning Council on the Administration of Justice
- # Local Boundary Commission
- # State Commission for Human Rights
- Rural Affairs Commission
- ** State Geographic Board
- # Western Interstate Commission for Higher Education
- Yukon-Taiya Commission

DEPARTMENT OF ADMINISTRATION

- # Personnel Board
- # Public Employees Retirement Board /2
- Alaska Pioneers' Homes Advisory Board

DEPARTMENT OF COMMERCE

- **# Alaska State Development Corporation
- **# Alaska State Housing Authority
- **# Alaska State Mortgage Association
- # Alaska Transportation Commission
- # Public Service Commission
- * State Bond Committee
- @ Licensing/Examining Boards:
- # Board of Examiners in the Basic Sciences
- Board of Barber Examiners
- Board of Chiropractic Examiners
- Collection Agency Board
- # Board of Dental Examiners
- # Board of Electrical Examiners
- Board of Engineers and Architects Examiners
- Board of Governors (Alaska Bar Association)
- Board of Hairdressing & Beauty Culture Examiners
- # State Medical Board
- Board of Nursing
- Board of Examiners in Optometry
- # Board of Pharmacy
- # Board of Psychologist Examiners
- Board of Public Accountancy
- # Real Estate Commission
- # Board of Veterinary Examiners
- Board of Welding Examiners

DEPARTMENT OF ECONOMIC DEVELOPMENT

- ** Small Business Development Corporation
- # Tourism Advisory Board
- ** Alaska Industrial Development Authority

DEPARTMENT OF EDUCATION

- # Board of Education
- # Board of Vocational Education
- # Board of Vocational Rehabilitation
- State Textbook Commission

DEPARTMENT OF FISH AND GAME

- **# Alaska King Crab Marketing and Quality Control Board
- # Board of Fish and Game
- # Guide Licensing and Control Board

DEPARTMENT OF HEALTH AND WELFARE

- Advisory Board on Alcoholism
- ** Air Pollution Control Commission
- **# Board of Parole
- **# Comprehensive Health Advisory Council

DEPARTMENT OF HIGHWAYS

- * Alaska Toll Bridge Authority

DEPARTMENT OF LABOR

- **# Alaska Workmen's Compensation Board
- Employment Security Advisory Council
- ** Fishermen's Fund Advisory and Appeals Council
- ** Manpower Training Advisory Council

DEPARTMENT OF NATURAL RESOURCES

- * Mineral Resource Fund Board /3
- # Soil Conservation Board
- # Water Resources Board

DEPARTMENT OF REVENUE

- # Alcoholic Beverage Control Board

Office of the Governor

- Reapportionment Advisory Board

Department of Administration

- Alaska Teachers' Retirement Fund Advisory Board

Department of Education

- Alaska Higher Education Facilities Commission
- Superintendents' Advisory Commission

Department of Fish and Game

- Advisory Committees to the Board of Fish & Game

Department of Health and Welfare

- Executive Clemency Advisory Board
- Statewide Day Care Advisory Committee
- Mental Health Planning Committee/Mental Retardation Planning Committee

Department of Labor

- Manpower Advisory Committee

Department of Natural Resources

- Map Advisory Committee

University of Alaska

- # Board of Regents

- * Ex officio - state officers or employees
- ** Partly ex officio
- # Appointed by Governor and confirmed by Legislature
- @ Administrative services provided by Department

- /1 To serve until July 1, 1973
- /2 The Alaska Teachers' Retirement Fund Advisory Board exists under Executive Order of the Governor
- /3 Inactive

PREPARED BY THE LEGISLATIVE AFFAIRS AGENCY

through the Legislative Affairs Agency and is responsible for legislative research and reports, hearings, and administrative assistance to legislators; and a Legislative Audit Committee, with six members, which is largely responsible for audits of all State agencies.

The judicial branch is headed by a Supreme Court of five justices having appellate jurisdiction, and a Superior Court of 11 judges. The Legislature has established a system of District Courts and Magistrates for civil cases, misdemeanors, violations of political subdivision ordinances, and similar matters. The State's Judicial Council, headed by the Chief Justice of the Supreme Court, consists of three lay members appointed by the Governor with the consent of the Legislature, and three attorneys appointed by the Alaska Bar Association. The principal functions of the Judicial Council are to make nominations to the Supreme and Superior Court benches, and to conduct studies for the improvement of judicial administration, reporting to the Supreme Court and to the Legislature.

Administration

Central administrative control of all departments is maintained through an annual Executive Budget, compiled and administered for the Governor by the Department of Administration.

Budget requests are submitted by each department, are reviewed and adjusted by the Governor, and are then transmitted to the Legislature for further review, amendment and approval. The Executive Budget must be in balance when submitted to the Legislature, or new tax laws must be included to provide additional income.

The Department of Administration is responsible to the Governor for budget administration following adoption by the Legislature. This responsibility is carried out by a system of allotments which permits coordination of expenditures with revenues.

Services

The services provided by the various departments of State government are depicted in Exhibit III-8. During fiscal 1968, State disbursements totaled \$212,043,000, of which \$205,436,000 was from the General Fund and the balance from other related funds. Highways, public education, health and welfare, public works (including airports and ferries), the University of Alaska, and fish and game are the primary service areas in terms of operating expenses and capital improvements, as shown by the table below.

ALASKA STATE GOVERNMENT: FUNCTIONS OF THE PRINCIPAL DEPARTMENTS

OFFICE OF THE GOVERNOR

Secretary of State (Elections and other duties)	Local Affairs Agency Rural Development Agency State Museum
Other minor agencies	

ADMINISTRATION

Centralized services: Personnel (classification, pay, retirement), accounts and disbursements; purchase and supply, distribution and mail; space allotment; executive budget preparation and execution; pioneers' homes.

COMMERCE

Regulation of banking, securities, insurance; professional licensing boards; corporations; veterans; weights and measures; power development; Public Service Commission; Transportation Commission; Housing Authority.

ECONOMIC DEVELOPMENT

Promotion for economic development of state resources, including tourism, through collection, analysis, and reporting of data and advertising.

EDUCATION

State Board of Education. Administers state program for school administration, instruction and construction; state library and library services.

FISH AND GAME

Administration of state program for the conservation, development, and regulation of fish and game resources (commercial and sport); research, bounty program; Fish and Game Board.

HEALTH AND WELFARE

Administration of state and federal aid programs; comprehensive health planning; sanitation; vital statistics; juveniles; probation and parole; mental health; alcoholism.

HIGHWAYS

Administration of the state program for the construction, maintenance, and operation of state highways, roads, bridges, traffic signs and signals, and related facilities.

LABOR

Administration of state programs governing employer-employee relations; wages, hours, safety, workmen's compensation, unemployment compensation; statistics.

LAW

Legal services for all state agencies; opinions and instruments, legislative drafting and review; civil actions; all prosecutions of violations of state law; Commission on Uniform State Laws.

MILITARY AFFAIRS

Administers state program for the Alaska National Guard (Army and Air); and organizes state militia if the National Guard is called into federal service; Alaska Disaster Office.

NATURAL RESOURCES

Administers the state program for the conservation and development of natural resources; forests, lands, water, minerals, oil and gas, agriculture, parks, historical sites, and soil conservation.

PUBLIC SAFETY

Administers state program for law enforcement and protection of life and property; state police, fire prevention, and the watercraft safety program.

PUBLIC WORKS

Administers the state program for construction, maintenance and operation of state-owned buildings, docks, floats, and airports; operation of the state ferry system; general equipment maintenance.

REVENUE

Administration and enforcement of tax laws; collection, investment and management of state revenues; motor vehicle registration; log and cattle brand registration; nonprofit gambling laws; Alcoholic Beverage Control Board.

By the
Legislative
Affairs Agency

Cash Expenditures From Current Operating Funds
Fiscal Years 1964 Through 1968

(Thousands Of Dollars)

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
General Government	\$ 15,721	\$ 23,692	\$ 26,427	\$ 28,463	\$ 35,495
Education	34,085	37,099	41,037	47,147	56,394
Health, Welfare, Safety	16,823	15,226	21,150	22,462	26,556
Conservation, Natural Resources	7,610	7,046	8,014	9,624	9,072
Transportation	<u>63,690</u>	<u>74,750</u>	<u>64,214</u>	<u>83,203</u>	<u>84,526</u>
Total	\$137,929	\$157,813	\$160,842	\$190,899	\$212,043

Source: State of Alaska Annual Financial Reports
(preliminary for 1968).

Primary responsibility within the State government for serving the outdoor recreation needs of Alaska's people and visitors is delegated to the Parks and Recreation Section of the Division of Lands in the Department of Natural Resources. Outdoor recreation services are also provided by the Sport Fish and Game Divisions within the Department of Fish and Game, by the Division of Waters and Harbors in the Department of Public Works, and by the Department of Highways. Promotion of tourism is handled by the Travel Division within the Department of Economic Development, and assistance with the development of tourist facilities is a major objective of the Industrial Development Division of the Department of Economic Development.

LOCAL
GOVERNMENT

The old standard of "a county seat within a day's horseback ride of every citizen" has never been applicable to Alaska. Vast distances, widely dispersed population groups, the high cost of providing community services, and the self-reliant spirit of people who live in what is still almost a frontier have precluded the systematic formation of counties, townships and cities.

However, because local governments in Alaska are recent developments for the most part, Alaskan communities are at some advantage in evaluating and avoiding the problems which have plagued local governments in both rural and urban areas of other states. Half of Alaska's 75 State-chartered cities and all 10 boroughs have been incorporated subsequent to 1960.

Boroughs

The borough form of local government has been developed to provide a single areawide government for economically and geographically homogeneous areas. Exhibit III-9 is a map showing Alaska's boroughs. The boroughs have areawide powers over certain matters, such as education, and provide other services according to the needs and means of the various districts which can be established within a borough. Additional borough services may be authorized by the Borough Assembly in the case of first-class boroughs (of which there is only one - the Greater Juneau Borough) and by majority vote of the electorate in the case of second-class boroughs (of which there are eight). Third-class boroughs (the Haines Borough is currently the sole example) are limited to providing educational services only.

The first-class Greater Juneau Borough provides recreational services, but the voters of only one second-class borough, the Matanuska-Susitna Borough, have authorized parks and recreation powers on an areawide basis. However, second-class boroughs, under their planning and zoning authority, can plan for and preserve areas for public purposes, including recreation.

State-Chartered Cities

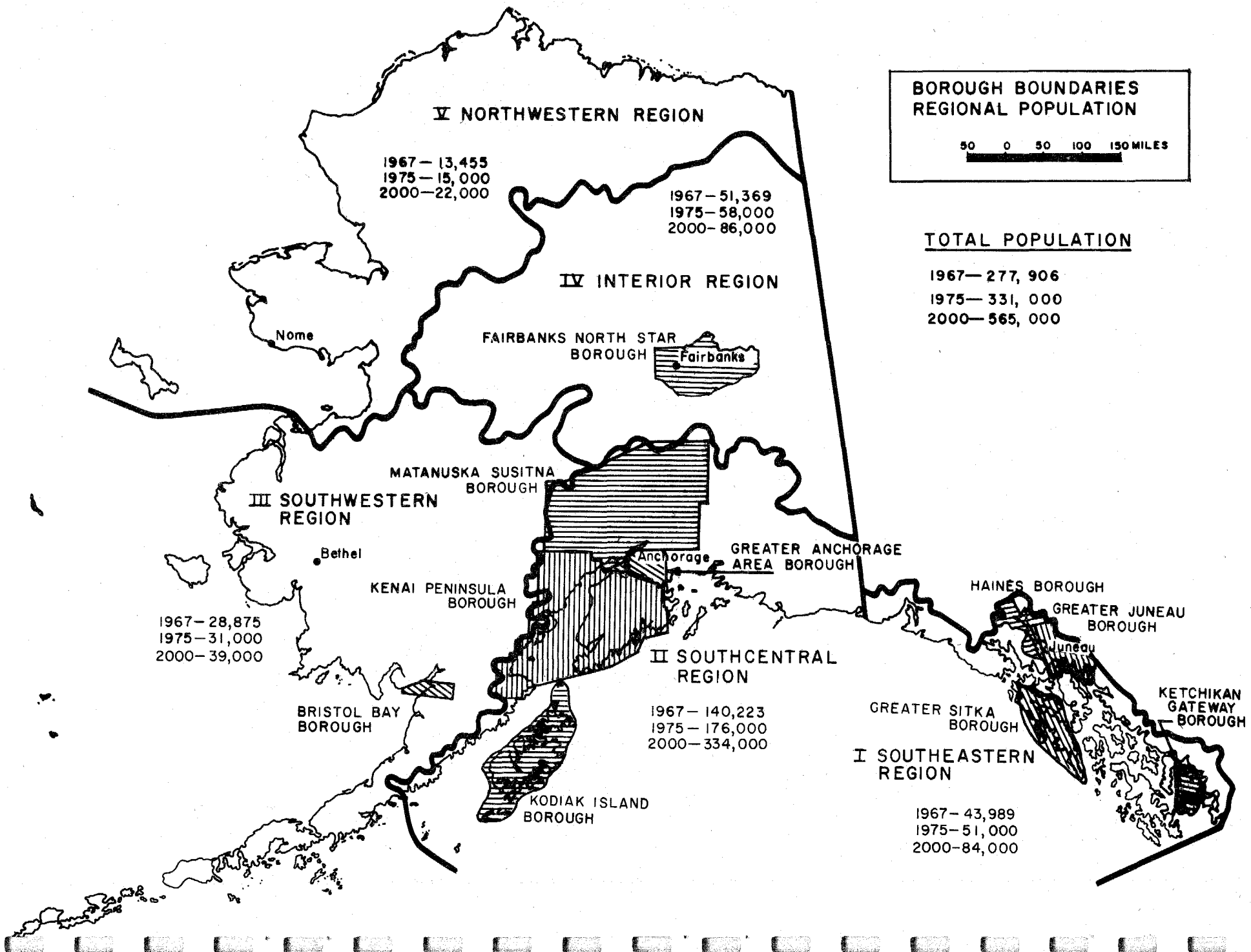
According to the Alaska Statutes only first-class and home-rule cities (of which there are 27) have the legal authority to become involved in parks and recreation programs. The 48 second-, third- and fourth-class cities could acquire legal authority to participate in recreation programs by means of an amendment to the Alaska Statutes.

The oldest incorporated city is Skagway in Southeastern Alaska, which was incorporated on June 6, 1900, to provide for the needs of the thousands of gold-seekers taking the Chilkoot Trail into the Yukon. Only nine other cities were incorporated in that first decade. In the 1960's, numerous rural communities have been organized as fourth-class cities under the Village Incorporation Act.

Federally Chartered Cities

Only one city, Metlakatla, in Southeastern Alaska, was organized under an Act of Congress, which provided for the band of Tsimshian Indians who immigrated from Canada in 1891.

In accordance with the Indian Reorganization Act of 1934 and 1936, 60 village councils, which represent people of one-quarter or more native blood, were established throughout Alaska. These councils participate in



various Bureau of Indian Affairs programs. In many instances, they are the sole form of local government, and represent the entire community in numerous all-native villages. However, many of the village councils organized under the Indian Reorganization Act have become, or are now becoming, fourth-class cities under the State's Village Incorporation Act.

Other native communities, not formally organized according to State or Federal laws, are governed by traditional councils of varying degrees of formality.

A complete breakdown of local governments in Alaska by region is presented in Exhibit III-10.

LOCAL GOVERNMENTS IN ALASKA, BY REGION

<u>Type Of Local Government</u>	<u>Region</u>					<u>Total Alaska</u>
	<u>Southeastern</u>	<u>South Central</u>	<u>Southwestern</u>	<u>Interior</u>	<u>Northwestern</u>	
Boroughs						
First-class boroughs	1	-	-	-	-	1
Second-class boroughs	2	4	1	1	-	8
Third-class boroughs	1	-	-	-	-	1
Total	<u>4</u>	<u>4</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>10</u>
Communities						
State-chartered cities						
Home-rule cities	6	7	-	1	-	14
First-class cities	5	3	1	3	1	13
Second-class cities	7	-	3	-	-	10
Third-class cities	-	7	-	-	-	7
Fourth-class cities	1	3	8	6	13	31
Total	19	20	12	10	14	75
Federally chartered cities	1	-	-	-	-	1
Chartered cities within boroughs	8	18	-	2	-	28
Communities with both IRA(a) and State charters	9	-	3	2	9	23
Communities with IRA(a) charters only	1	2	16	5	13	37
Total	10	2	19	7	22	60
Total incorporated communities(b)	21	22	28	15	27	113
Unincorporated communities	1	11	64	18	5	99
Total(c)	<u>22</u>	<u>33</u>	<u>92</u>	<u>33</u>	<u>32</u>	<u>212</u>

(a) Indian Reorganization Act of 1934 and 1936.

(b) All State-chartered cities plus all Federally chartered cities plus communities with IRA charters only.

(c) Total number of communities of 25 or more people.

E - LAND OWNERSHIP

A prerequisite for parks and recreation is open space, a resource which Alaska possesses in great abundance. Thus, the ownership of Alaska's 365 million acres is an important consideration in planning for outdoor recreation. Exhibit III-11 is a map summarizing the status of land ownership in Alaska.

FEDERAL LANDS

The largest single landowner in Alaska is the Federal Government, which currently holds title to 358.8 million acres, or roughly 98 per cent of the State. Of this total, 85 million acres (23 per cent of Alaska) are reserved for special purposes, and another 29 million acres have been withdrawn for land classification studies by the Bureau of Land Management. In addition, all public lands are temporarily withdrawn from all forms of disposition through December 31, 1970, in order to prevent interference with the Native Land Claims settlement.

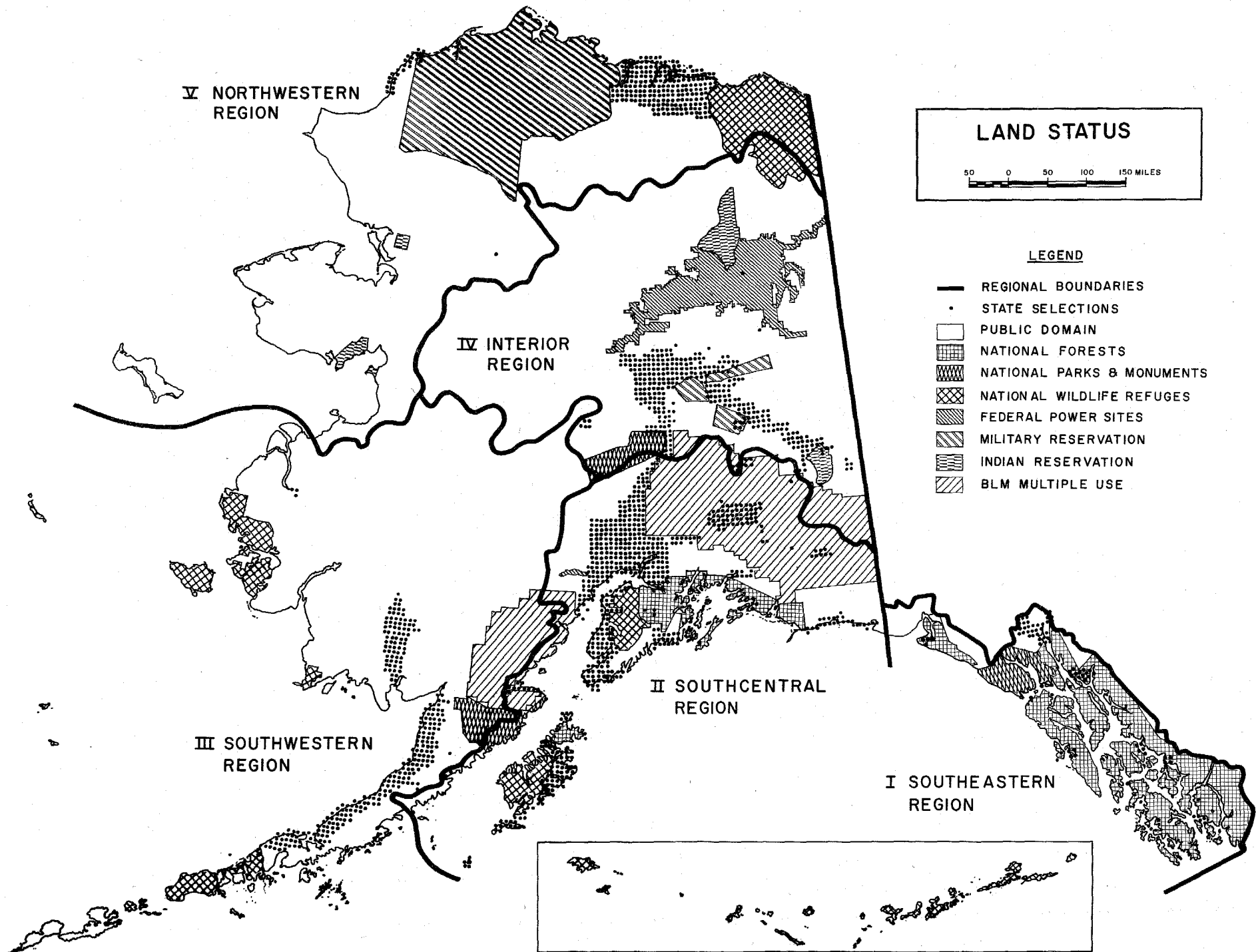
STATE LANDS

The State of Alaska, according to the Statehood Act, is authorized to select 102,550,000 acres from unappropriated and unreserved public domain, up to 400,000 acres from the National Forests, for community expansion and recreation; and an additional 400,000 from the unreserved public domain, for the purposes of community expansion and the establishment of new communities. These quantities will amount to approximately 28 per cent of the total land area of the State upon completion of the selection process.

As of April 1969, the State had selected approximately 24 million acres, tentative approval had been received for 8 million acres, and patents for 5.5 million acres.

LOCAL GOVERNMENT LANDS

Alaska's boroughs may select up to 10 per cent of the State lands within their boundaries, to be used for public purposes (including recreation) or as a source of revenue. As of May 5, 1969, the 10 boroughs had applied for approximately 450,000 acres, received approval of about 232,000 acres, and received patents to 24,600 acres.



PRIVATE
LANDS

Approximately half a million acres are privately owned, mostly concentrated in the urban areas. This land has been transferred from the Federal Government and (since statehood) from the State to private ownership, by a variety of programs.

Chapter IV

SUPPLY OF OUTDOOR RECREATION RESOURCES



Alpine skiing in Southcentral Alaska

IV - SUPPLY OF OUTDOOR RECREATION RESOURCES

As indicated in Chapter II, which described the approach followed in developing Alaska's Outdoor Recreation Plan, the supply of programs, areas and facilities is one of two basic elements used in identifying recreational needs. Matching the supply of resources against comparable demands provides a measure of the differences (or needs) which require attention in planning for future action. The purpose of this chapter is to identify the major recreation resources available to Alaskan residents and visitors. It has been developed from a number of sources, including detailed quantitative inventories prepared by public agencies and private groups in 1968, published sources and interviews, as well as the background of the Planning Task Force members.

This chapter is divided into five sections, as follows:

- A - Alaska's Recreation Environment - which describes the overall environment for recreation in Alaska.
- B - Agencies And Other Groups Concerned With Outdoor Recreation Resources And Programs - which identifies and reviews the agencies and programs related to recreation in Alaska.
- C - Principal Recreation Resources By Planning Region - which presents an inventory of recreation areas, facilities and unique features found in each of the State's five planning regions.
- D - Statewide And Adjacent Recreation Resources - which provides material on programs and recreation assets of Alaska not easily identified with individual regions, as well as those of the adjacent Canadian Provinces.
- E - Areas With Future Recreation Potential - which briefly touches on as yet untapped areas of significant future interest.

A - ALASKA'S RECREATION ENVIRONMENT

Alaska is unusually rich in recreation resources, both in the amount of land available for recreation and in its quality. The facilities, however, and the means of access to much of the land are less than adequate for meeting even existing demands. This section of the chapter reviews Alaska's substantial assets for recreation, the present access situation, and the recreation challenge now facing the State.

RECREATION AREAS AND FACILITIES

While most of Alaska's 365 million acres of mountains, forests, tundra and waters are currently available for outdoor recreation activities, only 48 million acres (13 per cent of the total area) have been reserved for public use, with emphasis on environmental preservation and recreation, such as national forests and private resorts. Moreover, only small portions of these reserves are managed solely for their recreational and scenic qualities, such as national and state parks.

Exhibit IV-1, on the following page, breaks down the total area reserved for public use (including recreation) by (a) dry land, wetland and water acreages, and (b) the following six classes of recreation lands (defined more fully in the separate volume of Appendixes):

- Class I, High Density Recreation Areas, which provide space and facilities for intensive use, such as playgrounds, playing fields, tennis courts or skating rinks, plus the necessary support facilities for all kinds of recreation
- Class II, General Outdoor Recreation Areas, which provide facilities for more extensive use, such as beaches, campgrounds, ski areas or hiking trails, all of which tend to blend into the environment
- Class III, Natural Environment Areas, which are managed in a way that retains the attractiveness of a natural setting for such activities as mountaineering, hunting and fishing, and at the same time provides for other compatible uses, such as grazing land or watersheds
- Class IV, Unique Natural Areas, which preserve outstanding natural features and scenery, frequently of scientific importance
- Class V, Primitive Areas, which are primarily roadless and largely undisturbed natural wild areas
- Class VI, Historic And Cultural Sites.

**STATEWIDE
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION**

TYPE OF CLASSIFICATION	NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION					
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	TOTAL (a)
Basic Classification						
Land	42,476,711	30,796	2,033	1,566	10,558	42,521,664
Wetland	2,958,718	6,521	7	77	111	2,965,434
Fresh Water	2,862,030	4,364	134	73	94	2,866,695
TOTAL (a)	48,297,459	41,681	2,174	1,716	10,763	48,353,793
Bureau Of Outdoor Recreation Classification						
Class I (High Density Recreation Areas)	469	18	924	16	1,103	3,633
Class II (General Outdoor Recreation Areas)	71,441	26,180	634	973	3,339	105,906
Class III (Natural Environment Areas)	29,048,426	15,419	506	523	5,444	29,075,230
Class IV (Unique Natural Areas)	3,690,561	0	0	90	476	3,691,513
Class V (Primitive Areas)	15,476,929	0	25	2	747	15,478,448
Class VI (Historic And Cultural Sites)	2,493	62	41	100	0	2,696

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

Exhibit IV-1 also shows that more than 99 per cent of all the area reserved for public use (including recreation) is Federally managed, and that nearly 45 million acres are classified as either natural environment or primitive areas.

Exhibit IV-2 is a map showing the location of existing recreation reserves larger than 640 acres on both State and Federal lands.

Exhibit IV-3 shows the Statewide inventory of recreation facilities and areas which are available to tourists and residents for such recreational pursuits as camping, picnicking, hiking and so on. This inventory also is broken down to show the level of administration. More detailed data on the present inventory of recreation areas and facilities are available for review in the Office of the Chief, Parks and Recreation Section, Department of Natural Resources.

NATURAL RESOURCES

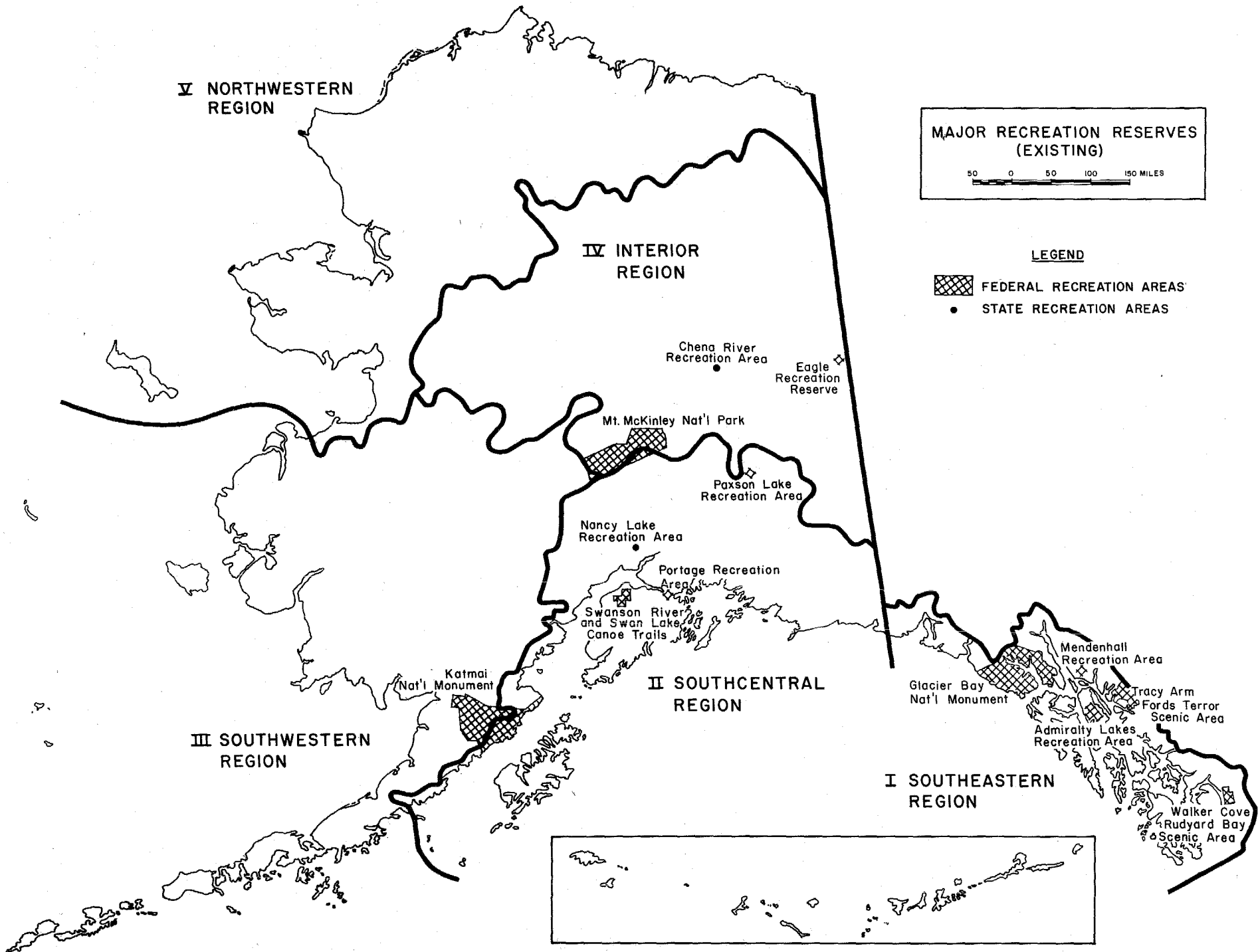
Many states share with Alaska one or more of its magnificent features, such as mountain ranges, primitive areas, or scenic shorelines. Few, however, can match the proportions or quality of these resources in Alaska, and none can offer the broad variety of this single State.

Alaska is the largest of the 50 states (larger than Texas, California and Montana put together) but has the smallest number of residents. It has more than 3,000,000 lakes larger than 20 acres, of which less than 300 are accessible by automobile. Long hot summer days in central Alaska breed gigantic mosquitoes, but in winter Thompson Pass (250 miles to the south) receives an average of 50 feet of snowfall. Thirteen mountains in Alaska are taller than the tallest peak of the other 49 states, while an area larger than Wisconsin is flat rolling tundra. Thus, sharp contrasts and superlatives characterize Alaska.

Mountain Ranges And Volcanoes

Alaska's mountain ranges are grouped generally into two basic systems, the Brooks Range and the Pacific Mountain System, both of which are shown in Exhibit IV-4. In the northern part of the State, the Brooks Range (an extension of the Rocky Mountain System), with peaks of 3,000 to 9,200 feet, runs 600 miles east and west, and 150 miles north and south. This range forms a nearly impenetrable barrier between the more populous central plateaus and the low, flat Arctic tundra to the north.

The second basic group of ranges, the Pacific Mountain System, includes the Aleutian Range, the Alaska Range, the Kenai-Chugach Mountains, the St. Elias Range and the Coastal Range. The Alaska Range of central Alaska is dominated by Mt. McKinley (20,320 feet), the highest peak on the North American continent. To the southwest of Mt. McKinley, the Aleutian Range contains still-smoldering volcanoes and the famous moonlike Valley of Ten Thousand Smokes, which 50 years ago experienced one of the greatest volcanic explosions of recorded history.



STATEWIDE
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers						
Number of areas	9	8	11	9	25	52
Acreage	56*	63*	240	15	32*	406*
Lodges And Camps(a)						
Buildings	15	-	1	3	147	166
Beds	225*	-	12	85	1,332*	1,654*
Acreage	n.a.	-	1	3	902*	906
Cabins (Open To The Public)						
Buildings	217*	2	1	9	347	576*
Beds	1,475*	n.a.	10	30	1,176*	2,691*
Acreage	203*	n.a.	12	n.a.	912*	1,127*
Warm-Up Huts						
Buildings	4	-	3	3	7	17
Simultaneous Capacity(b)	555	-	170	150*	180*	1,055*
Acreage	47*	-	1*	5*	1*	54*
Campgrounds - Developed Areas						
Number of campgrounds	71	56	10	6	44	187
Number of campsites	1,078	607	118*	87	480*	2,370*
Acreage	580*	3,165	21*	215*	67*	4,048*
Campgrounds - Group Camping						
Beds	8	-	-	295	22	325
Acreage	1	-	-	209	n.a.	210*
Picnic Areas						
Number of picnic areas	76	49	28	2	54*	209*
Number of picnic units	325	281	144*	13	2,126	2,889*
Acreage	79*	152*	59*	20*	53*	363*
Swimming Beaches (And Pools)						
Number	6	11	11	6	17	51
Square feet	23,000*	3,375*	8,875*	8,332*	8,332*	52,157*
Frontage feet	350*	530*	800	-	1,700*	3,380*
Bathhouses						
Number of units	3	2	11	5	25	46
Rifle And Archery Ranges, Skeet And Trap Fields						
Number	6	-	2	4	8	20
Acreage	9*	-	n.a.	10*	45*	64*
Golf Courses						
Number of holes	27	-	-	-	9	36
Acreage	87*	-	-	-	65	152*
Tennis Courts						
Number	20	2	17	4	-	43
Acreage	18	1	8*	1	-	28*
Baseball And Softball Diamonds						
Number	27	-	60	2	-	89
Acreage	117	-	64*	5	-	186*
Football Fields						
Number	5	-	3	1	-	9
Acreage	25	-	2*	2	-	29*
Soccer Fields						
Number	1	-	2	1	-	4
Acreage	n.a.	-	1*	3	-	4*
Track And Field Areas						
Number	3	-	1	-	-	4
Acreage	n.a.	-	n.a.	-	-	n.a.
Playgrounds						
Number	77	10	70	5	5	167
Acreage	76*	7	38*	3*	9	133*

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally. Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Other Outdoor Game Areas						
Number	-1	-	15	1	4	21
Acreage	10	-	2*	n.a.	n.a.	12*
Outdoor Cultural And Sports Viewing Areas						
Number of seats	-	-	4,630	300*	-	4,930*
Acreage	-	-	18*	4	-	22*
Hockey, Figure And Speed Skating Rinks						
Number	20	-	37	2	4	63
Acreage	506*	-	7*	2	5	520*
Toboggan, Sled, And Luge Hills						
Number	3	1	1	1	2	8
Acreage	11	1	1	5	402	420
Vertical descent (feet)	382	50	n.a.	20	n.a.	452*
Ski Jumps						
Number	2	1	1	1	1	6
Acreage	1	45	n.a.	70	3	119*
Length (feet)	60	n.a.	20	n.a.	n.a.	80*
Downhill Ski Slopes						
Number	9	1	2	4	33	49
Acreage	776	5	1*	12	970*	1,764*
Slope length (feet)	10,510*	n.a.	30*	1,170	30,900*	42,610*
Vertical descent (feet)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mechanical Ski Lifts						
Number	15	1	1	5	12	34
Capacity per hour	11,480*	200	n.a.	2,450*	5,000	19,130*
Length (feet)	16,810*	n.a.	n.a.	950*	21,500	39,260*
Vertical rise (feet)	2,656*	n.a.	n.a.	320*	5,250	8,226*
Trails						
Cross country skiing (miles)	230	26	25	-	36	317
Hiking (miles)	633	59	11	1	57	761
Horseback riding (miles)	48	46	5	-	12	111
Canoeing (miles)	355	-	-	2	42	399
Snowmobiling (miles)	230	50	5	3	71	359
Bicycle paths (miles)	-	-	4	-	-	4
Other (miles)	-	-	1	34	6	41
TOTAL (MILES)(c)	831	112	32	40	185	1,200
Campgrounds - Remote Wilderness						
Number of campgrounds	7	-	-	1	8	16
Number of campsites	130	-	-	75	260	465
Acreage	10	-	-	n.a.	17	27*
Scenic Turnouts And Roadside Rest Areas						
Number	7	28	5	-	8	48
Parking spaces	50	375*	30	-	75*	530*
Boat Launching Ramps						
Launching spaces	41	28	15	2	21	107
Acreage	22*	1*	8*	n.a.	7*	38*
Marina Slips						
Number of slips	92	67	1,207	33	121	1,520
Moorings						
Number of moorings	60	5	1,511	2	123	1,701
Airstrips						
Number of strips	4	-	4	1	26	35
Runway length (feet)	5,500*	-	16,900	4,500	36,002*	62,702*

To the east of Anchorage, the Chugach Mountains, 300 miles wide and 80 miles deep, form a major barrier separating the south central coast of Alaska from the central plateaus. Further east lies the St. Elias Range, with peaks rising dramatically from sea level to more than 18,000 feet within 20 miles of the coastline.

As the previous comments imply, the mountains of Alaska are both numerous and widely varied in size and geological background. The land area encompassed by major mountain ranges is without question larger than that in any other single state.

Water Resources

As with mountains, Alaska dominates the United States in statistics regarding water resources. Alaska has more "general coastline" (6,640 miles) than the rest of the United States together; it also encompasses an estimated 10,000 individual rivers and streams, as well as the approximately 3,000,000 lakes larger than 20 acres. Six rivers in the State extend more than 400 miles in length, and the Yukon, Alaska's most famous river, runs 1,875 miles through the State. Exhibit IV-5 shows the State's 14 known navigable rivers.

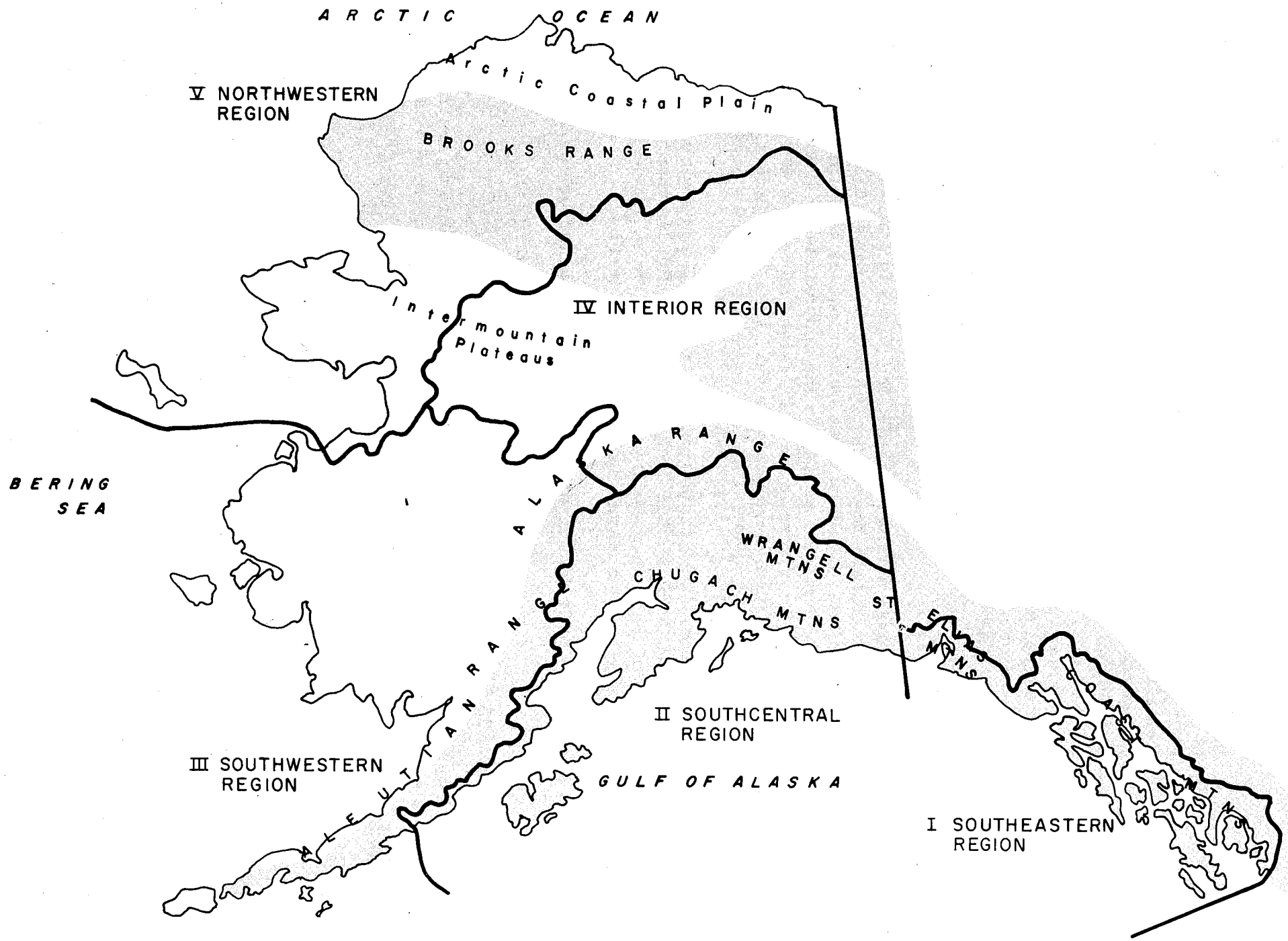
Waters off Southeastern Alaska contain remnants of ancient mountains that were submerged at the end of the Ice Age creating beautiful fiords, channels and islands. Into many of these channels flow Alaska's glaciers, masses of compacted ice slowly edging down mountainsides into lakes and bays.

Alaska's spring snow melt also creates seasonal streams through much of the State.

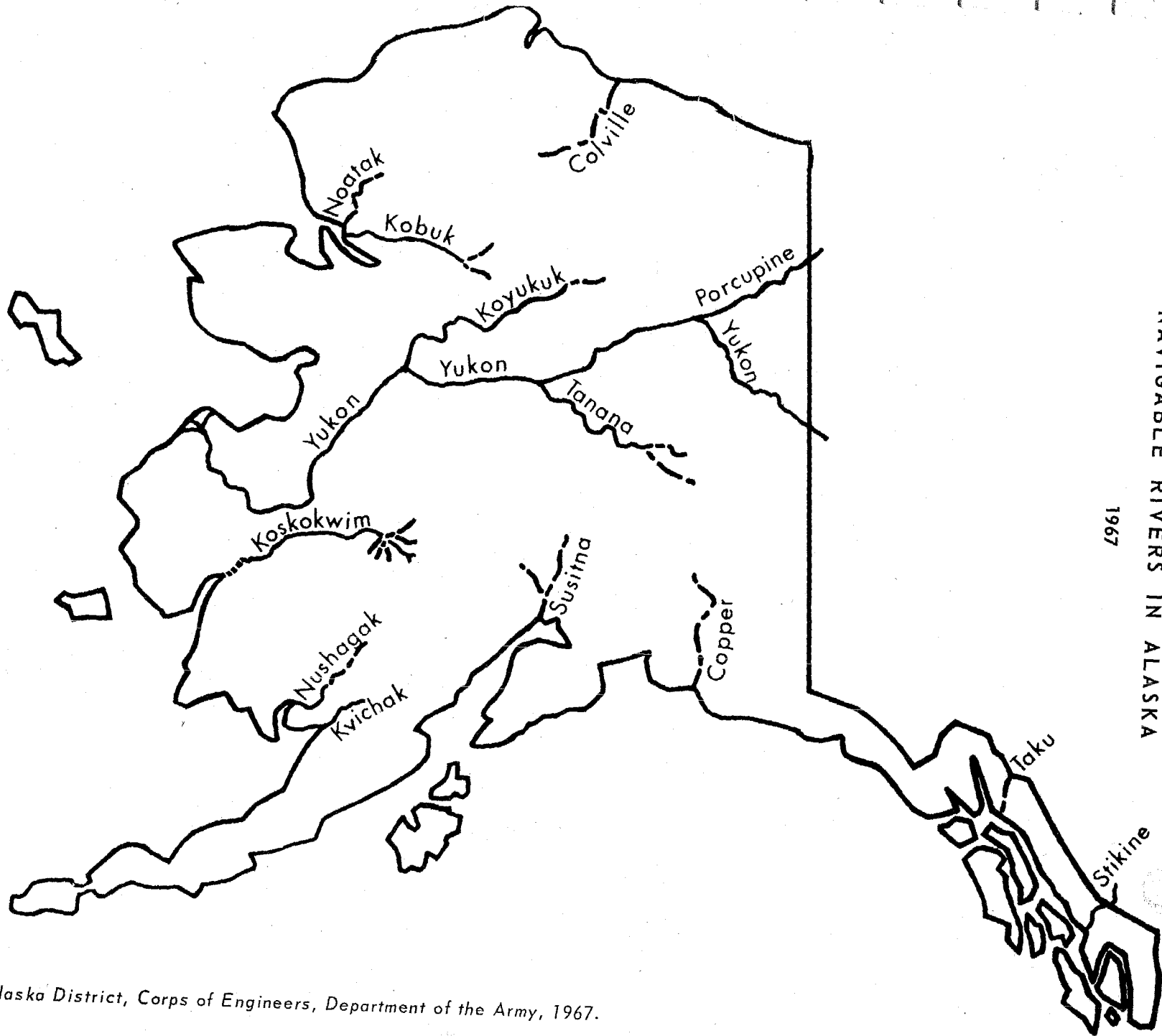
Primitive Areas And Wilderness

Alaska is also rich in primitive areas - lands largely unexplored by man. These areas exist because much of the State is unpopulated, the climate makes some areas of the State uninviting during the long cold winter months, and the cost of creating access to outlying areas is high.

These primitive areas are characterized by natural wild conditions, an absence of roads, and no permanent habitation or recreation facilities except a few trails. They are found throughout the State, and vary widely in their topography and other features.



MAJOR PHYSIOGRAPHIC DIVISIONS OF ALASKA



NAVIGABLE RIVERS IN ALASKA
1967

Source: Alaska District, Corps of Engineers, Department of the Army, 1967.

Largely found in Northwestern and Southwestern Alaska is tundra - vast treeless areas underlaid by permafrost, an endless bleak white expanse during the winter which bursts into beautiful color with the advent of spring. In summer, much of the tundra becomes inaccessible except by air transportation, because the long summer days turn the permafrost into a marshy quagmire. It is because of this condition that much Arctic oil exploration and drilling has to be done during the winter months. Plant life in the tundra is so fragile that the track of a single heavy vehicle can scar the surface for years after it has passed by; however, reseeding experiments now under way on the North Slope may lead to methods of revegetation.

In much of Southeastern and South Central Alaska, thousands of acres of hilly and mountainous areas are covered with virgin spruce, hemlocks, and alder. Lakes and cascading streams are prevalent throughout these hilly and mountainous areas, offering unparalleled scenic vistas. Birch, spruce and aspen characterize the inland forests.

Surprisingly enough, in view of this abundance of scenic primitive areas, Alaska has no legally defined Wilderness Area - that is, none of these millions of acres has been set aside to be retained in its natural and primeval state.

Climate

Any discussion of Alaska's natural resources must include consideration of its extremes of climate. Many outsiders mistakenly believe that the State's climate is frigid the year around, with little variation from one area to another. In fact, however, the Central Plateau area, between the Brooks Range and the Alaska Range, has experienced temperatures of 75 degrees below zero during the long winter, with highs of more than 100 degrees during the summer months when the sun never falls below the horizon. This central area has recorded colder winter temperatures than the Arctic tundra further north. Annual precipitation on the Arctic Slope is less than 10 inches.

The Arctic area, however, has strong winter winds which, combined with the low temperatures, result in extremely low chill factors. It is the combination of wind, low temperatures, snow, and a long winter that converts the marshy summer tundra into mile after mile of frozen white expanse.

South Central Alaska, on the other hand, benefits to some extent from the passing Japanese Current, which mitigates the rigors of climate for the populous coastal part of Alaska. Temperatures in Anchorage range from below zero in midwinter to a comfortable 49 to 65 during summer. The long summer days in South Central Alaska permit the Matanuska Valley cabbages to grow to two to three feet in diameter. During winter, however, much of the State receives heavy snowfall.

The Panhandle of Southeastern Alaska experiences a coastal climate only slightly harsher than that of Seattle or Vancouver. With this milder climate, however, comes fog and rainfall. At Port Walter, not far from Sitka, rainfall averages more than 18 feet per year. Although this is the extreme, many other communities of Southeastern Alaska average more than 100 inches per year and Juneau, the State capital, experiences 56 inches of rain and only 45 clear days in a typical year.

Fish And Wildlife

As with its other resources, Alaska has a wide variety of fish and wildlife, available nowhere else in the United States. In Alaska also are found more species of big game than anywhere else in the United States, and the population of nearly every major species is estimated to exceed that of Alaska's people.

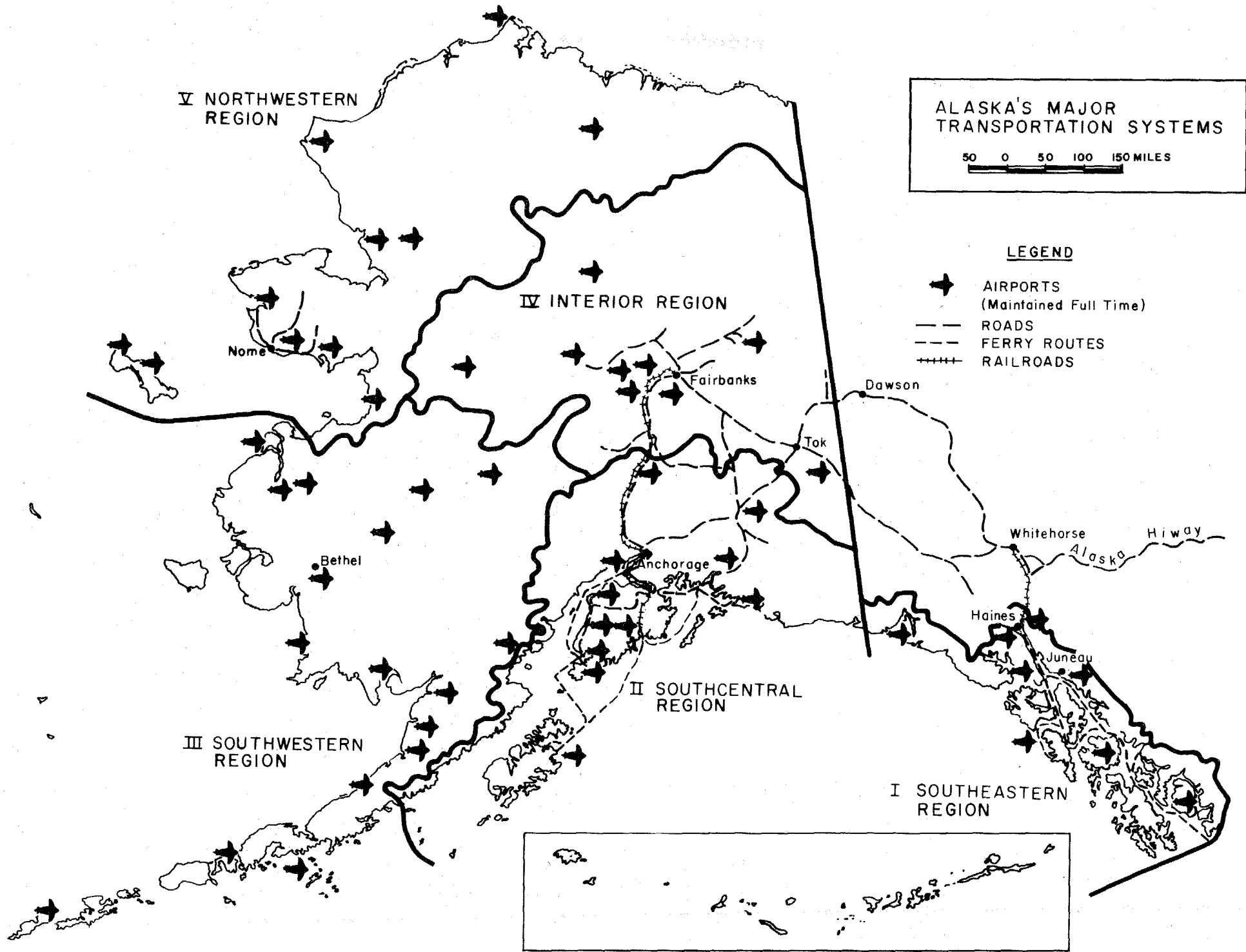
Salt waters abound with crab, salmon and other varieties of seafood to such an extent that commercial fishing has become one of Alaska's largest industries. Alaska's fish and wildlife resources are discussed at greater length in a later section of this chapter.

ACCESS TO RECREATION RESOURCES

Alaska suffers severely from the major problem affecting recreation in the United States as a whole - namely, that the resources are not where the people are, and that they are relatively inaccessible to the majority of the people.

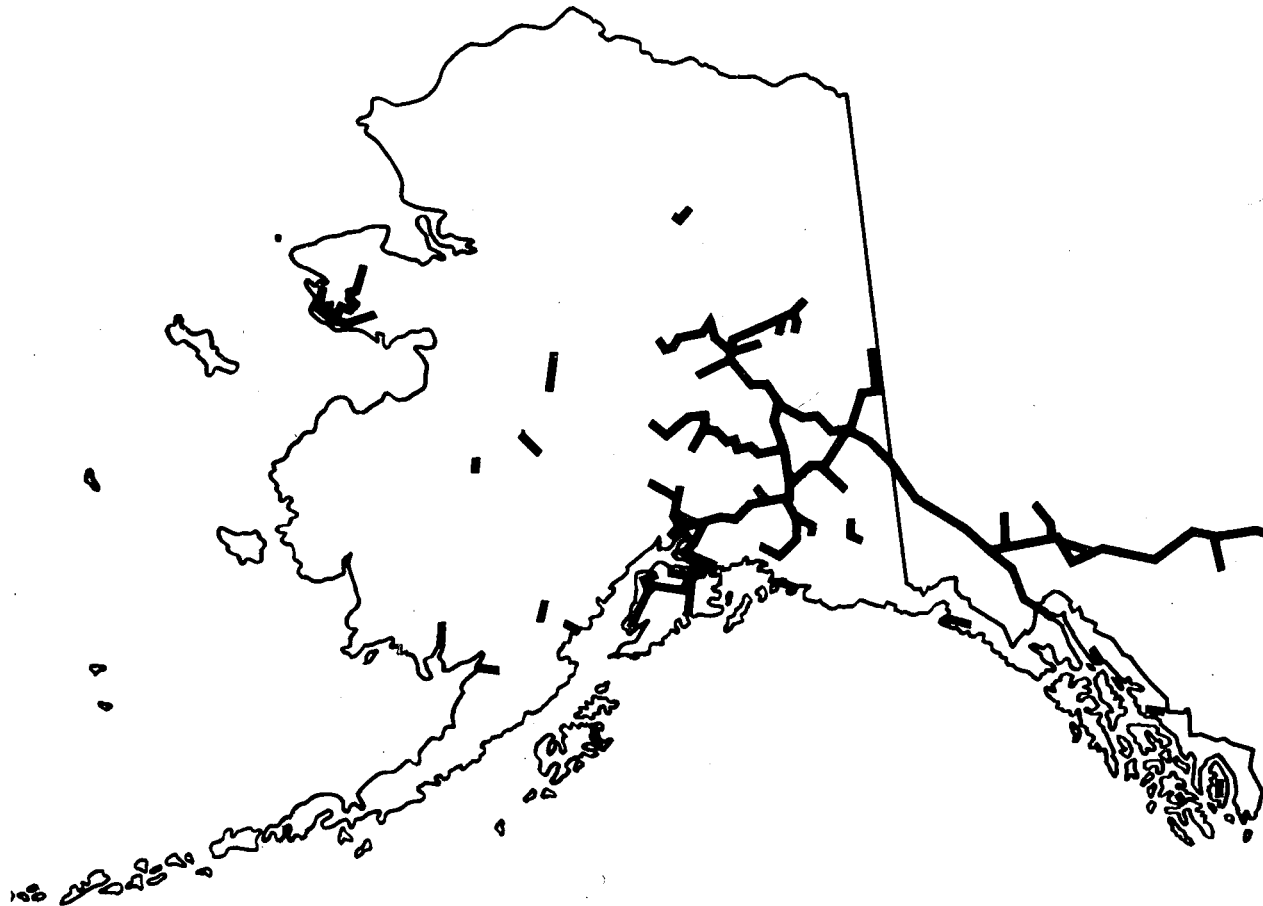
Total highway and road mileage in Alaska is very low, air transportation costs are high, many ports and rivers freeze over in winter, and only two rail lines exist to serve the entire population. Recreation inventories generally focus on the number of acres and the amount of facilities available for recreation, but this does not give a true picture in Alaska. With so much of the available acreage remote and inaccessible, little use is made of it. Exhibit IV-6, which shows the State's major transportation systems, gives some indication of the present situation.

The problems of access, quite naturally, are not limited to recreation; the absence of a more substantial system of transportation in Alaska has been a major factor retarding the economic development of a variety of natural resources. Nonetheless, the deficient access system has had a major impact on recreation and tourism - particularly because so many of the recreation activities associated with Alaska (such as sightseeing, hunting,



ALASKA'S EXISTING ROAD SYSTEM

1967



Source: Alaska Division Of Highways, Juneau, Alaska

fishing and camping) require adequate access if the average person, with limited time and money, is to participate. The many lakes are of little value to the fisherman when an expensive charter flight is the only way he can reach the less crowded ones.

If it can be assumed that 95 per cent of the recreational activity of all kinds occurs within one to five miles of roadways, waterways and airports, it can be estimated that 95 per cent of all recreation in Alaska occurs on less than 6 per cent of the State's land area. In fact, a recent study by the Bureau of Land Management (BLM) indicates that use pressure on Alaska's recreation lands is equal to, or greater than, that found in other states with BLM land such as California, Colorado or Arizona.

Highway Transportation

Alaska currently has approximately 7,000 miles of road throughout the State, distributed as shown in Exhibit IV-7. The following table dramatically illustrates how small this amount is in relation to the total land area:

<u>State</u>	<u>Acres Of Land Per Mile Of Road</u>
Alaska	52,211.7
Arizona	2,202.7
Idaho	1,357.3
Montana	1,295.4
Colorado	898.5
Wyoming	890.6
California	842.1
Oregon	821.3

Thus, Alaska has approximately 24 times as much acreage per mile of roadway as in the next closest state, Arizona. Causes of this situation include the State's vast land area, its small population (and concurrently small motor fuel taxes to support highways), its isolated position, and the difficulties of climate and terrain which result in costs of \$150,000 to \$1,000,000 per mile for new highway construction, with an average cost of \$200,000.

Alaska's highway system has sprung up primarily as a result of defense, commercial and social requirements for connecting major population centers without much consideration of recreation access, with the result that many of the State's attractions can be reached only by air or water. Fortunately, however, the highway system does afford access to a number of major

attractions, including Mt. McKinley National Park, the Kenai National Moose Range, and Prince William Sound. In addition, most of the State's campgrounds can be reached directly from the highway, and many fine hunting areas and fishing lakes can be reached directly or with a small hike from the roadways. At the same time, although much of the highway system passes through scenic areas, there is a shortage of wayside turnouts to facilitate sightseeing.

The completion of the Nancy Lake State Recreation Area north of Anchorage will provide highway access to a large variety of recreation resources for residents and visitors to South Central Alaska.

The highway system also links up with another of the State's major recreation assets, the State ferry system of Southeastern Alaska (discussed below).

Water Transportation

Water access in Alaska can be divided into three classes - steamship, ferry, and river or stream. Steamships provide transportation to and from the State's principal ports in Southeastern Alaska, and are the primary means of reaching the State for an increasing number of visitors. The recreational value of these steamships, however, tends to be limited to the access they provide to recreational areas and the sightseeing opportunities available to passengers during the trip.

The 1,850-mile ferry system facilitates sightseeing in South Central and Southeastern Alaska, and forms the major transportation link in Southeastern Alaska. This system not only enables passengers to enjoy the scenic opportunities of the area but also opens up many parts of the region to residents and visitors for such activities as camping and picnicking.

Rivers and streams are a minor system of access to Alaska's recreation resources, since very few participants use them. Some private transportation is very enjoyable, however, particularly on the Tanana and Stikine Rivers, and canoe trails are available to the more interested and hardy recreationists who wish to explore new areas or to reach remote hunting, fishing and camping areas.

Railroads

Alaska has two railroads: the White Pass and Yukon Route, operating between Skagway and Whitehorse, Yukon Territory; and the Alaska Railroad, owned by the Federal Government, which runs from Seward and Whittier through Anchorage and Mt. McKinley National Park to Fairbanks.

Both railroads provide access to points of interest along the routes, and the White Pass and Yukon offers special auto and camper shipping service for its passengers. The Alaska Railroad allows passengers to disembark at choice hunting and fishing spots, and is perhaps the easiest form of access to the State's principal tourist attraction, Mt. McKinley. In addition, both railroads are renowned for the scenic areas they pass through, and for the sightseeing opportunities they provide.

Air Transportation

Air transportation will probably continue to be a dominant form of transportation in Alaska. Commercial carriers provide basic access to principal cities, and are supplemented by a great many small operators and bush pilots who fly to more remote locations. In addition, many private aircraft are used in Alaska for both recreation and access; indeed, Alaska has the nation's greatest numbers per capita of pilot licenses (0.025) and aircraft (0.013).

In addition to lakes and bays that can be used by aircraft with pontoons, it is estimated that there were 1,034 landing sites in Alaska in 1967 broken down as follows:

- Federally owned airports: 29
- Municipal and State airports: 259
- Private airports: 46
- Bush strips: approximately 700.

Most of these facilities are, of course, minimal and poor weather restricts many others to seasonal operation.

Popular as flying is in Alaska, it remains an expensive mode of access, and its costs are heightened by unpredictable weather conditions, high fuel and other operating costs, and great distances. As a result, many of the State's most spectacular attractions, such as the Tikchik Lakes and the

Katmai National Monument, receive comparatively few visitors, and the cost of access is a major obstacle to opening up such recreation assets to large numbers of people.

Other Forms Of Access

In addition to the four basic means of access discussed above, two others deserve mention. Trails of all kinds are a major recreation asset, providing a variety of activities such as hiking, nature study, horseback riding, etc., as well as access to many scenic areas, lakes, hunting grounds and the Forest Service cabin system. The Gold Rush Trails of Alaska have been recognized as having national significance, and have been recommended for possible inclusion in the system of National Scenic Trails.

Special vehicles, such as snowmobiles, jeeps or land rovers, also provide access in some areas where roads are nonexistent. However, problems of terrain tend to limit the use of these vehicles as a means of reaching areas of recreational interest, and snowmobiles, in particular, are used not so much for recreation access as for basic Arctic transportation and winter sport.

ALASKA'S PRESENT POSITION

With mountain ranges covering areas larger than most other states, slowly creeping glaciers, and thousands of square miles of primitive area, Alaska projects an image of permanence and indestructibility found almost nowhere else. But this permanence is in part illusion. Both natural forces and those involved in economic development modify the scenery, sometimes overnight, sometimes through slow persistent effort.

Alaska has often been called a national resource because of its primitive, frontier character. Many who have never even visited the State feel that its natural resources should be protected and preserved as part of the American heritage. With the constant increases in the national population and in the level of discretionary income, the demand for this national resource will grow from the present latent interest of those who dream of visiting Alaska to active participants coming to see America's last frontier.

Alaska has been and continues to be in a strong position regarding its natural resources. With nearly all of the State's land area in public hands, there is a clear opportunity through planning to avert many of the problems encountered in the other 49 states. Moreover, thanks to rich petroleum resources in particular, Alaska has the opportunity to enjoy the advantages of economic progress toward self-sufficiency without major detriment to the natural environment.

B - AGENCIES AND OTHER GROUPS CONCERNED WITH OUTDOOR RECREATION RESOURCES AND PROGRAMS

Many agencies and other groups do or can exert a significant impact on outdoor recreation in Alaska. This section identifies and briefly reviews the key organizations and their programs.

ALASKA OUTDOOR RECREATION COUNCIL

The Alaska Outdoor Recreation Council is the principal agency in Alaska for bringing together representatives of Federal, State, local and private groups involved with recreation planning and development. Created in 1964, the Council was originally intended as a vehicle for communication and cooperation among these groups and agencies, and met once or twice a year at various locations around the State. Because of the substantial variations from one region of Alaska to another, the need for more frequent meetings, and the costs of travel, the Council reorganized itself in 1968, providing for smaller regional councils in Southeastern, South Central and Interior Alaska which will meet approximately quarterly to communicate and coordinate recreational developments in these areas.

Final details remain unsettled at the present time, but an Executive Committee for the Council was also created in the reorganization. This committee, chaired by Alaska's Secretary of State, is composed of a small number of Federal, State, local and private representatives. It has been suggested that this body screen all proposals for programs related to the Federal Land and Water Conservation Fund Act, and function as the principal spokesman for recreation in Alaska.

FEDERAL AGENCIES

There are a number of Federal agencies with varying degrees of responsibility for matters affecting outdoor recreation.

Department Of The Interior - Bureau Of Outdoor Recreation

The Bureau of Outdoor Recreation (BOR) was created in 1962 and charged with responsibility for coordinating the recreation activities of the many Federal agencies whose activities relate to outdoor recreation. The Bureau, an agency of the Department of the Interior, is not a land-managing agency

(such as the National Park Service or the Forest Service) but instead attempts to provide leadership in meeting the nation's outdoor recreation needs through:

- Preparation and maintenance of a continuing inventory of the nation's outdoor recreation needs and resources
- Formulation and maintenance of a comprehensive nationwide outdoor recreation plan
- Provision of technical assistance to, and cooperation with, states, their political subdivisions, and private outdoor recreation interests
- Sponsorship and assistance in outdoor recreation research
- Promotion of coordination among Federal outdoor recreation plans and activities
- Administration of a program of financial assistance (on a matching basis) to the states, and through the states to local public agencies, for planning, acquiring and developing public outdoor recreation resources
- Coordination of a program of recreation land acquisition by the National Park Service, the Forest Service, and the Bureau of Sports, Fisheries and Wildlife.

Through its regional office in Seattle, the BOR has provided a significant amount of technical assistance in the preparation of this Plan.

As indicated in Chapter II, the Land and Water Conservation Fund administered by the BOR has provided \$2,337,348 to Alaska through 1968. Recent amendments to the original Act promise to increase the State's share substantially, to an estimated annual allocation of some \$900,000 (if appropriated by Congress).

Federal Field Committee

The Federal Field Committee for Development Planning in Alaska was created by Presidential Executive Order in 1964, primarily in response to the major earthquake that shook South Central Alaska in that year. The committee was given no direct recreation responsibilities in Alaska but was intended to serve as a focal point for government efforts to create sustained and coordinated economic development. Because of its overall coordinating function on a Federal level and its direct involvement with Alaska's overall development, it has some potential to become a significant coordinating agency for the important Federal sector concerned with Alaska's outdoor recreation planning and resource development.

Department Of The Interior - National Park Service

The National Park Service, as an agency of the Department of the Interior, was established to conserve, for the benefit and enjoyment of present and future generations, areas of national significance which contain exceptional scenic, scientific, historical and recreational resources. Areas meeting National Park Service criteria have primarily been those of superlative natural beauty, and those that interpret the natural history of the continent.

Because of their spectacular and unique features, National Park Service areas in Alaska have become key tourist attractions. Mount McKinley National Park, for example, has been for years the prime symbol of Alaska to tourists visiting the State.

At present the National Park Service administers four areas in Alaska, totaling more than 7 million acres:

- Mount McKinley National Park, the State's focal attraction
- Katmai National Monument, a dying volcanic region
- Glacier Bay National Monument, encompassing unique glacial features
- Sitka National Monument, which combines the Russian and Indian heritages of the State.

In each area, the National Park Service has overall responsibility for planning, developing, operating and maintaining facilities. Concessionaires operate facilities at Mount McKinley, Katmai and Glacier Bay. The National Park Service is also responsible for biological management.

With the passage of the National Historic Preservation Act of 1966, the National Park Service has begun to administer a program for maintaining and expanding a register of districts, sites, buildings, structures and objects significant in American history. Actions to study and plan for the preservation, acquisition and development of such properties are required to be coordinated with the development of each state's outdoor recreation plan.

Department Of Agriculture - U. S. Forest Service

The U. S. Forest Service, an agency of the Department of Agriculture, administers nearly 21 million acres of land in South Central and Southeastern Alaska. Its major responsibilities include recreation, wildlife, timber and watershed management.

In addition to managing the nation's two largest National Forests, the U. S. Forest Service carries on cooperative programs with the State Forester in Alaska concerning the management, protection and market development of timber resources on State and private forest lands, and conducts research at Forest Experiment Stations, a Forestry Sciences Laboratory, and several experimental forests. The Forest Service also cooperates with the Alaska Department of Fish and Game in a program of wildlife management on forest lands.

The Tongass National Forest, composed of two administrative units, encompasses more than 16 million acres (nearly all of Southeastern Alaska); the Chugach National Forest covers some 4.8 million acres in the Prince William Sound, Afognak Island and Kenai Peninsula areas.

The recreation facilities provided in the National Forests include campgrounds for various kinds of camping, picnic areas, 120 recreation trails, and a unique system of approximately 150 cabins and shelters available in outlying areas for a nominal charge. The Forest Service also provides recreation facilities and interpretive services at unusual areas of scenic, geological, historical or archeological interest, such as Mendenhall and Portage Glaciers. Finally, the Forest Service allows, under permit, the private operation of seven lodges and Mount Alyeska, the State's major ski area.

The Chugach National Forest is easily accessible by means of the Seward, Sterling and Hope highways and many lateral secondary roads. While there are no roadways through most of the Tongass National Forest, roads to the borders provide access to a significant number of the recreation areas. Thousands of additional visitors are enabled to view these virgin forests and their wildlife and other attractions by means of air trips, cruise ships, the State ferries, or the excellent Forest Service trails.

Throughout the nation as a whole, the U. S. Forest Service is also involved in three other significant recreation programs: the National Scenic and Wild Rivers System, the National Trails System, and the National Wilderness System (all present Wilderness Areas in the United States are on Forest Service land, although studies of potential Wilderness Areas are also being conducted on Fish and Wildlife Service and National Park Service land). These three programs are discussed further in Section D of this chapter.

Department Of The Interior - Fish And Wildlife Service

The Fish and Wildlife Service of the Department of the Interior is composed of two bureaus - the Bureau of Commercial Fisheries, and the Bureau of Sports, Fisheries and Wildlife. While much of the work of the Bureau of Commercial Fisheries benefits outdoor recreation, the Bureau of Sports, Fisheries and Wildlife is more directly involved in matters pertaining to this area.

The basic objective of the Bureau of Sports, Fisheries and Wildlife is to protect, preserve and manage areas and facilities in all National Refuges and Ranges for the welfare of wildlife and the enhancement of fish and wildlife values. Where there is need, and no conflict with this basic objective, the Bureau's policy is to foster recreational pursuits that are directly associated with public enjoyment of wildlife, including nature observation and photography, nature interpretive centers, fishing, and (frequently) hunting. In Alaska, several indirectly associated uses are often necessary to fulfillment of the primary recreational goals, such as camping, canoeing, cross-country skiing, and other, more primitive means of transportation.

The National Refuges and Ranges in Alaska are listed in the following table:

<u>Name Of Refuge Or Range</u>	<u>Year Established</u>	<u>Major Wildlife</u>	<u>Number Of Acres</u>
Aleutian Islands	1913	Sea birds, sea otter	2,869,000
Arctic	1960	Caribou, sheep, birds	8,899,840
Bering Sea	1909	Birds and sea life	41,113
Bogoslof	1909	Sea lions, sea birds	390
Chamisso	1912	Arctic birds	641
Clarence Rhode	1960	Wildlife	2,817,000
Forrester Island	1912	Sea birds	2,832
Hazen Bay	1937	Waterfowl	6,800
Hazy Islands	1912	Sea birds	42
Izembek	1960	Waterfowl	511,147
Kenai Moose Range	1941	Moose	2,057,197
Kodiak	1941	Bear	1,817,600
Nunivak	1929	Musk oxen	1,109,384
Pribilof Islands	1910	Fur seal	49,173
St. Lazaria	1909	Sea birds	65
Semidi	1932	Sea birds	8,422
Simeonof	1958	Sea otter	10,442
Tuxedni	1909	Sea birds	6,439
Total			20,207,527

Much of this vast acreage is still beyond the reach of the casual visitor. However, for anyone who is willing to forgo the amenities of civilization, the opportunities are unmatched. In keeping with the wilderness aspect of most of the Bureau lands in Alaska, the recreational facilities will probably remain

quite primitive for some time to come. Recreational use will probably be limited to hunters, fishermen, and natural environment enthusiasts who are not averse to packing their own facilities in an airplane or a boat, on a horse, or even on their backs.

The one exception at present is the Kenai Moose Range. Here, the need and the demand are great enough to justify the expenditure of Bureau funds for the development of compatible recreational facilities, such as campgrounds and canoe trails. Similar recreational development is anticipated in other areas, in response to public demand, as better access is developed.

Department Of The Interior - Bureau Of Land Management

Multiple-use management of approximately 297 million acres (roughly three-fourths of the total area of Alaska) is the principal responsibility of the Bureau of Land Management (BLM) in the Department of the Interior. Outdoor recreation is recognized by the BLM as one of the main uses of Alaska's public domain resources. Six established programs of the BLM contribute directly to recreation planning and development:

- Recreation inventory and planning
- Land classification
- Recreation construction
- Recreation maintenance
- Roads and trails construction
- Roads and trails maintenance.

The Statehood Act granted Alaska the right to select, from the 271 million acres not reserved for specific purposes, some 103 million acres of land prior to 1984. While selection is temporarily at a standstill pending resolution of the Native Land Claims issue, the selection right quite naturally places a premium on Federal/State cooperation in planning for future use, since the BLM will retain responsibility for sound resource management on the remaining lands.

BLM recreation planning has been closely coordinated with the State Division of Lands, and BLM recreation complex plans have all been reviewed by, and are on file with, the Division of Lands, Parks and Recreation Section. Duplication of planning, construction and maintenance of recreation facilities

has been eliminated by a BLM/State agreement. It has been agreed that BLM facilities within State lands will be deeded, or management transferred, to the State.

BLM currently maintains 26 recreation sites across the State, and has three projects under way; these are:

- Tangle Lakes boat launch
- Pinnell Mountain Trail
- White Mountains Trail.

Most of the existing sites are easily accessible by highway, and contain various roadways and trails available for public use. Public domain lands administered by the Bureau are also open to hunting and fishing under appropriate State rules and regulations.

Department Of Housing And Urban Development

The Department of Housing and Urban Development (HUD) has overall responsibility for administering its own programs, coordinating the activities of other agencies working on the problems of housing, urban development and mass transportation, and encouraging public and private solutions.

A number of HUD programs are related to outdoor recreation. The most significant of these are the grants provided under the open space and urban beautification programs. For the most part, 50 per cent matching grants are available to help public agencies acquire and preserve urban lands having value for park, recreation or scenic purposes. Funds can be provided for land acquisition and basic development where the projects are a part of an areawide open space and development program which, in turn, is consistent with areawide comprehensive planning. As of June 1969, one urban beautification program and one open space program have been completed in Anchorage. No further projects are under way at this time.

A third program involves 50 per cent matching grants for the acquisition, improvement and restoration of areas, sites and structures of historic and architectural value in urban areas.

Loans may also be made to small communities for the construction and improvement of local public facilities (including recreation facilities) essential to the health and welfare of the residents. Loans are available to communities of less than 50,000 population and to Indian tribes, where private financing is not otherwise available on reasonable terms.

Military Installations In Alaska

The Army, Navy and Air Force supply outdoor recreation facilities to military personnel stationed throughout Alaska, and for the most part to dependents and civilian employees of the military community. These facilities are sometimes also available to civilians. A wide variety of outdoor recreation facilities are offered by the three branches for such activities as boating, fishing, picnicking, tennis, football and skiing. For example, Green Lake, situated not far from Elmendorf Air Force Base, provides boating, fishing and picnicking facilities, while Fort Richardson maintains a golf course, a riding stable and a ski run.

Corps Of Engineers

Through its Civil Works Program, the Corps of Engineers has constructed, improved and maintained the nation's harbors and navigable waterways, and assumed a major responsibility for the Federal program of flood control, shore protection, and other uses of water resources. The Corps provides for public recreation at its reservoirs, which are scenic lakes affording boating, fishing, swimming, camping and other outdoor recreation pursuits. Basic facilities provided at reservoirs include access roads, boat launching ramps, sanitary facilities, drinking water, campgrounds, and simple picnic facilities. States and local governments are actively encouraged to participate in funding, operating and maintaining public-use facilities at Corps projects in accordance with the policies set forth in the Federal Water Project Recreation Act (PL 89-72).

The Alaska District of the Corps investigates and reports on all water resources projects proposed under the Civil Works Program in Alaska at the request of Congress. The outdoor recreation potential of each project is investigated and evaluated as one of the basic purposes. If Congress approves and funds the proposed project, the District designs and constructs it. To date, however, no recreation facilities have been constructed on Alaska projects, primarily because of the lack of projects involving reservoirs.

Future projects, particularly the Chena River Reservoir, indicate a large potential for the provision of outdoor recreation facilities by the Corps of Engineers in Alaska. These projects will be closely coordinated with those of other members of the Alaska Outdoor Recreation Council, with the Bureau of Outdoor Recreation, and with the Alaska Outdoor Recreation Plan, to ensure the optimum enhancement of outdoor recreation in Alaska.

Department Of Agriculture - Soil Conservation Service

The Soil Conservation Service (SCS) of the Department of Agriculture is responsible for developing and carrying out a national soil and water conservation program in cooperation with landowners and land operators and with other government agencies.

SCS takes the lead within the Department of Agriculture in establishing public recreation areas in watershed projects and in assisting landowners and land operators with the development of income-producing recreation enterprises on private land.

Under the provisions of the Small Watershed Act of 1954, the Department of Agriculture shares with state and local agencies up to half the cost of construction, land rights, and minimum basic facilities for access to, and enjoyment of, areas to be managed by state and local sponsors for public recreation. Cost-sharing also is available for providing sanitary and other facilities needed for recreation. State fish, wildlife, and park agencies are eligible for assistance, as are counties, municipalities, and special-purpose districts.

The Department of Agriculture may advance funds to local organizations for immediate purchase of lands, easements, and rights-of-way to prevent encroachment of other developments and sites upon improvement work in small watershed projects. Such advances have to be repaid with interest before construction starts.

Department Of The Interior - Bureau Of Indian Affairs

The goal of the Bureau of Indian Affairs (BIA) in Alaska is to help Indians, both individuals and groups, to achieve economic and social self-sufficiency and full participation in Alaska's society. Despite a long record of public concern and a number of programs designed to help, most of the Indians in Alaska are still at the bottom of the economic ladder.

Indian tribes can get assistance from the BIA, in the form of technical guidance and long-term loans, in establishing tourist attractions and commercial outdoor recreation developments on tribal lands.

Within the limitations of its funds, the BIA also attempts to provide recreation opportunities at BIA-administered schools, and it is quite interested in developing programs which will help to involve Indians in the rapidly growing tourism and recreation industries.

Department Of The Interior - Alaska Power Administration

The Alaska Power Administration (APA) is a successor to the Bureau of Reclamation in Alaska, and has prime responsibility in the investigation, development, design and operation of water and related land resources in the State. Like many other agencies, the APA is not directly involved in recreation, but does consider the recreation aspects of its studies and projects. Assistance in considering and planning for recreation is received from the Bureau of Outdoor Recreation, the U. S. Forest Service, the National Park Service, and the Bureau of Sports, Fisheries and Wildlife.

On August 1, 1968, the 30-member State-Federal Alaska Water Study Committee submitted a preliminary plan of study and budget estimate for a \$3 million to \$4 million Alaska Water Study, under guidelines of the Water Resources Council pursuant to the Water Resources Planning Act of 1965. A start of the three-year effort in fiscal year 1971 is under consideration. The 18 substudies will include consideration of recreation, esthetics, and fish and wildlife values.

Department Of Commerce - Economic Development Administration

The Economic Development Administration (EDA) is indirectly but very beneficially involved in recreation. Its prime responsibilities are in the area of long-range economic development and programming for areas and regions of substantial and persistent unemployment and underemployment. In this effort, it seeks the creation of new employment opportunities through development of new, and expansion of existing, facilities and resources.

Recreation has been considered by the EDA as one potential vehicle to achieve its basic objectives in Alaska. One project funded by EDA in this respect was the Cresap, McCormick and Paget study of tourism, completed in December 1968. Additional projects are being considered. Generally, EDA support includes grants and long-term loans to communities for public works and development facilities, long-term loans to public and private applicants to help finance the purchase of land and facilities, technical assistance, research, and job retraining.

Department Of Transportation - Bureau Of Public Roads

The Bureau of Public Roads (BPR) cooperates with the State Department of Highways in developing systems of highways that will permit driving for pleasure, and that will serve many types of outdoor recreation.

The Bureau is not directly involved with recreation, but seeks to focus attention on the need for better roadside development, and renders technical service regarding problems of public control of highway access and roadside

development. Safety and convenience, good highway appearance, pleasing outlooks from the highways, and low-cost maintenance are major considerations in the initial stages of highway location and design. Other objectives are elimination of the scars of construction, proper treatment of roadsides, and acquisition and development of publicly owned rest and recreation areas and sanitary and other facilities either within or adjacent to the highway right-of-way.

The BPR cooperates with the National Park Service and the U. S. Forest Service in the field of outdoor recreation through the design and construction of roads in park and forest areas.

Department Of Transportation - Federal Aviation Agency

The Federal Aviation Agency (FAA) of the Department of Transportation has basic responsibility for encouraging general and commercial aviation and operating a system which permits safe flights through the navigable air space of the United States.

The FAA works closely with Alaska's Department of Public Works (Division of Aviation) in the construction and maintenance of airports for use by commercial, charter and private aircraft.

The FAA administers a Federal grant-in-aid program to help public agencies take part in developing an adequate nationwide system of airports, including airports which provide access to remote outdoor recreational areas. These grants are generally made on a matching basis, with the Federal Government and the local public agency each supplying 50 per cent of the cost of airport development.

STATE AGENCIES

The State-level agencies having significant impact on recreation in Alaska are described below.

Office Of The Governor - Division Of Planning And Research

The Division of Planning and Research, located in the Office of the Governor, has primary responsibility for:

- Comprehensive planning on a Statewide basis
- Coordination and interpretation of the various planning efforts of the State agencies

- Application of the programs to the total planning effort of the State
- Analysis of total effort in relation to the goals and objectives of the the State
- Review of State agency capital improvement budgets and development of the budget proposal to the Legislature.

Thus, the Division is in a position to exert a significant influence on the future development and management of Alaska's outdoor recreation programs and facilities.

Through its seat on the Executive Committee of the Alaska Outdoor Recreation Council, the Division of Planning and Research also plays a key role in the development of the State's Outdoor Recreation Plan and the coordination of recreation-related agencies.

Department Of Natural Resources - Parks And Recreation Section

The Parks and Recreation Section of Alaska's Department of Natural Resources has substantial impact on recreation in Alaska. The Section (organized as one element of the Division of Lands, which is in turn a part of the Department of Natural Resources) exercises responsibility in five basic areas:

- Outdoor recreation planning, including the preparation of Alaska's Statewide Outdoor Recreation Plan (this document), and the provision of staff for the Alaska Outdoor Recreation Council
- Project coordination, involving the administration of Land and Water Conservation Fund projects sponsored by the State and its political subdivisions, as well as the planning, review and inspection of all projects
- Park design, including the supervision of master planning for large State Parks and Recreation Areas, the design of specific sites and State Park System facilities, and technical assistance to political subdivisions of the State and quasi-public groups
- Park construction, involving the supervision of contract or force account construction work and upgrading of facilities
- Operation and maintenance of lands, waters and facilities in the State Park System, including State Recreation Areas, Historic Sites, etc.

The Section had its beginnings in the 118 camping and picnic units at 32 sites transferred to the State from the Bureau of Land Management at the time of Statehood. These 118 units have grown in ten years to 699 camping and picnicking units at 71 sites. In addition, the Section is responsible for the development of the Nancy Lake State Recreation Area and the Harding Lake Recreation Area, as well as future planning for the development of recreation areas on the upper Chena River and on the Kenai Peninsula near the Swanson River (Captain Cook State Recreation Area).

Department Of Fish And Game

The Department of Fish and Game is charged with the responsibility of managing all of Alaska's fish and game resources in the best interests of the public, with the objective of maintaining both quantity and quality (in terms of trophy-size catches and natural settings), to supply productive recreation for an urban population strongly oriented toward fishing and hunting, as well as for the large numbers of visitors to the State.

In addition to managing 247 acres near Fairbanks for wildlife and wildlife habitat, the Department works closely with the land-managing agencies and the cities and boroughs concerning classification, cooperative management agreements, wildlife stipulations on leases, zoning as related to wildlife, and so forth. The Department's responsibility in this regard is closely related to, and dependent upon, the efficient functioning of the land-controlling agencies (Division of Lands, Bureau of Land Management, U. S. Forest Service, military installations, boroughs, etc.), although the Department does not currently have responsibilities for these lands or jurisdiction over them. The Department has recently begun a program of participation in land management through cooperative agreements with landowning agencies.

The Department is currently carrying out joint evaluations and agreements with other agencies involving the recreational uses of large parcels of land. The staff of the Department draws upon the professional training of its local biologists to ensure that recreation, along with other land uses, is compatible with the conservation of fish and game. Developments which may be destructive to the habitat are monitored by the Fish and Game staff.

The Department also gathers and evaluates fishing and hunting harvest information, carries out programs through newspapers, radio and television to inform the public of places to hunt and fish and when the chances of success would be best, and also takes measures to ensure the continued availability of both the wildlife involved and the essential habitat.

Department Of Economic Development - Alaska Travel Division

Alaska's Department of Economic Development has primary responsibility for the promotion and encouragement of economic activity in the State, and works closely with individuals and community groups to help them put together specific development projects.

In Alaska, tourism and outdoor recreation are very closely related. The Alaska Travel Division is a key element in the Department of Economic Development, responsible for promoting interest in, and tourist travel to, the State. In addition to cooperating with the Planning Task Force in the development of this plan, the Travel Division assumes the following responsibilities:

- Cooperation with organizations representing private tourist operations
- Stimulation of the interest of Alaskan citizens in the economic importance of the tourist industry, and encouragement of intra-State travel
- Administration of a tourism development program which provides up to \$500 in matching grants to local governments for the development of tourist attractions
- Assisting potential investors in finding financial support for the development of tourist facilities.

Department Of Public Works - Division Of Waters And Harbors

The Division of Waters and Harbors is responsible for providing public docks, floats, grids, launching ramps and associated harbor facilities, primarily throughout the State's coastal areas. The scope of the program is related directly to the amount of tax revenue received from the sale of marine fuel, and all funds are provided by direct legislative appropriation (the current annual rate is approximately \$550,000). Division personnel, frequently working closely with the Corps of Engineers, conduct preliminary investigations and surveys, prepare design specifications, and supervise the actual construction projects.

Nearly all construction is concentrated along the coast of Southeastern and Southwestern Alaska. Initially, these facilities were primarily "work boat" or "fishing boat" harbor facilities, most of them located within protected boat basins near the various cities or fishing villages. Recent trends toward increased recreational boating in Alaska, however, have necessitated the construction of facilities designed specifically for these smaller pleasure

and sports fishing craft. All new harbor facility projects now include at least a minimum of 25 per cent recreational facilities. Moreover, since the inauguration of the Alaska Marine Highway System, increased tourist travel has further intensified the demand for recreational boating facilities.

The Division also cooperates with the U. S. Forest Service in putting in mooring buoys along coastal areas of the National Forests, and has begun to utilize the Land and Water Conservation Fund (where possible) as a source of monies for the construction of recreational boat launching facilities.

The basic goal of the Division's recreational program is to provide adequate recreational boating facilities, not only in the immediate vicinity of the heavily populated areas, but also at all popular hunting, fishing and general recreational sites throughout the Inland Passage in Southeastern Alaska as well as certain areas in Prince William Sound in South Central Alaska.

Department Of Public Works - Division Of Marine Transportation

The Division of Marine Transportation operates one of the State's finest tourism resources, the State ferry system. This system, which is the major mode of transportation in Southeastern Alaska and also operates in South Central Alaska, serves as the primary vehicle for nonresident sightseeing of many of the tourist attractions in these areas.

Department Of Public Works - Division Of Aviation

The Division of Aviation has Statewide responsibility for the construction and maintenance of airports for use by commercial, charter and private aircraft. These facilities support one of Alaska's key recreational activities, flying for pleasure, and they also provide access to most of the outlying recreational areas which can be reached in no other way.

Department Of Health And Welfare

The Department of Health and Welfare has Statewide responsibilities covering the general health and welfare of the Alaskan population. The Branch of Environmental Health provides educational, consultative, survey and law enforcement services aimed at healthful management of water supply, waste and refuse disposal, control of rodents and insects, heating, lighting, ventilation, and similar environmental elements. The Division of Public Health also provides sanitation services for all commercial facilities, swimming pools, bathing beaches, state parks, and tourist accommodations.

Department Of Highways

The Department of Highways is responsible for building and maintaining Alaska's scenic and arterial roadways, as well as wayside rests, scenic turnoffs, information signs, and beautification projects. The Department takes recreation into consideration in planning and designing roadways, and gives the Parks and Recreation Section an opportunity to review plans for proposed highway location and construction.

In 1967, as part of the preparation of the highway beautification program, the Department of Highways (in cooperation with the Federal Bureau of Public Roads and the State Division of Lands) took a very extensive Statewide inventory of where it would be desirable to put the various features to be funded by this program. Unfortunately, the Federal Government did not appropriate any funds for beautification projects in 1968 or 1969. As a result, only 38 rest areas with 103 picnic tables were funded. Should funding become available from Federal or State sources, completion of the remaining projects would be undertaken, and would require approximately two years.

Department Of Education

Alaska's Department of Education is responsible for those schools not administered by city, borough or BIA school systems. Outdoor education is now an accepted part of the elementary-secondary curriculum, although it has not yet been especially emphasized in Alaska's schools. The Department of Education has no recreation projects planned.

University Of Alaska

The University of Alaska is involved with outdoor recreation in two major ways. First, its Department of Health, Physical Education and Recreation teaches a number of recreation courses, including alpine and nordic skiing, ice skating, swimming, wilderness skills, hiking and camping. (The Department uses rented and borrowed facilities, plus those under its own direct control.)

Second, through one element of its Institute of Social, Economic and Government Research, the University maintains a professional competency in outdoor recreation planning and special recreation studies.

LOCAL GOVERNMENTS

Local government in Alaska is divided into two fundamental levels - the borough, and the city. The recreational powers and efforts of these two groups are discussed separately below.

Boroughs

At this time, there are ten organized boroughs in Alaska, and one large unorganized borough encompassing the balance of the State. To have recreation powers, a borough must either be a first-class borough or have been voted these powers in a referendum. Greater Juneau is Alaska's only first-class borough, and the only second-class borough with recreation powers is Matanuska-Susitna.

The Greater Juneau Borough has begun an active recreation program that includes the establishment of a recreational budget for seasonal personnel and a full-time director, equipment, facilities and services, the analysis of City- and Borough-owned properties in terms of their recreation potential, and the creation of a development priority list. The Borough is scheduled to take over all phases of recreation now handled by the City except for one area, the Evergreen Bowl.

The residents of Matanuska-Susitna Borough have voted parks and recreation powers to the Borough, and since that time the Borough has aggressively pursued the development of its recreation potential. It has completed a substantial study of tourism and recreation in the Borough.

The Greater Anchorage Borough does not have parks and recreation powers but is planning toward the day when these powers will be assumed. It has recently undertaken a study which, among other objectives, seeks to identify those areas which should be classified for future recreation development.

The Fairbanks Recreation Council, a diversified group representing numerous government agencies and sportsmen's organizations, has assessed the long-range recreation needs of the Fairbanks area.

Kodiak Island Borough, which also has no park and recreation powers at present, is awaiting results of a study made by its Parks and Recreation Committee regarding adoption of these powers; the Borough may place this question on the next regular ballot. Like others, Kodiak Island Borough utilizes zoning classification to protect various areas for future recreation utilization.

The Bristol Bay, North Star, Gateway, Greater Sitka and Kenai Peninsula Boroughs have no parks and recreation powers at this time. Except for Bristol Bay, however, the principal cities of these boroughs do have such powers.

Cities

In a situation paralleling that of Alaska's boroughs, only the State's first-class and home-rule cities have parks and recreation powers. These cities, listed below, can apply for, receive and expend Federal monies for recreation projects:

- | | |
|-----------|------------|
| Anchorage | Nenana |
| Cordova | Nome |
| Douglas | North Pole |
| Eagle | Palmer |
| Fairbanks | Pelican |
| Haines | Petersburg |
| Homer | Seldovia |
| Hoonah | Seward |
| Juneau | Sitka |
| Kenai | Skagway |
| Ketchikan | Soldatna |
| Klawock | Unalaska |
| Kodiak | Valdez |
| | Wrangell |

Many of these cities have various kinds of resident and visitor outdoor recreation facilities administered by the local government, volunteer committees, or other responsible groups. In addition to Anchorage, three of the cities (Fairbanks, Ketchikan and Bethel) have at least one full-time person constituting a recreation staff.

As the State's largest city, Anchorage retains the largest local government recreation planning and development capability in Alaska. The Parks and Recreation Department of Anchorage has developed a comprehensive recreation plan which includes the development of facilities beyond the immediate Anchorage area, the programming of recreational activities, and the apportionment of spheres of responsibility for recreational facilities and programs among the city, the school district, public utility districts, community groups and civic organizations. In addition, the city's Parks and Recreation Department maintains a five-year capital improvements plan.

QUASI-PUBLIC GROUPS

Many quasi-public groups are involved with outdoor recreation in Alaska. These agencies include semigovernmental groups, groups with a primary purpose related to recreation, and groups with an ancillary interest in recreation.

The Alaska State Housing Authority (ASHA) is involved with recreation in two basic ways. First, it assists the State's communities, as a part of the development of their comprehensive plans, in planning to meet present and projected recreation demands, as well as in analyzing and projecting recreation demand and employment whenever recreation is or can be a factor in the local economy. Second, ASHA assists in the initiation and implementation of specific projects related to recreation, such as the proposed Old Valdez historic preservation project.

Ten other quasi-public groups reported significant recreation activities or facilities to the Planning Task Force:

- Alaska Dog Musers Association
- Alaska Indian Arts, Inc.
- Alaska Women Golfers Association
- Anchorage Community YMCA
- Chugach Baptist Association
- Haines Sportsmen Association
- Kachemak Ski Club, Inc.
- Saint Theresa's Summer Camp
- Susitna Girl Scout Council
- Western Alaska Council - Boy Scouts of America.

These groups, as a sampling of all quasi-public groups in the State, engage in such diverse activities as establishing and maintaining trails, working towards the acquisition and development of golf courses, developing group camping sites, and owning and operating summer camps.

In general, Alaska's quasi-public groups tend to supplement government and private efforts, particularly in providing facilities extensively used by selected groups of persons - whether the organization is established primarily for recreation reasons (such as the Haines Sportsmen Association, where shared facilities reduce cost to members) or whether other purposes are paramount but recreation is an important element of total purpose (such as the Boy Scouts and Girl Scouts).

PRIVATE SECTOR

A significant force in outdoor recreation in Alaska is the role of private commercial enterprise. Without private investment in the means of travel for tourists and the facilities for their use, it would be difficult if not impossible to realize the full potential value of governmental action in the field of outdoor recreation.

Two basic elements of recreation are provided largely by private endeavor in Alaska. The first is facilities; these include hotels, motels, restaurants, service stations, souvenir shops, private campsites, picnicking areas, boat ramps, ski areas, and boats. The second is services, primarily the transportation which visitors and residents use to reach and travel about the inaccessible parts of Alaska. Guide services in Alaska also play an important role in all phases of outdoor recreation, from polar bear hunting on the ice floes in the Bering Sea to sightseeing and taking photographs of the Alaskan landscape.

Facilities

Analysis of the private sector shows an ever-increasing awareness of the need of accommodations for both residents and out-of-State visitors who are seeking recreation. Present tourist housing in Alaska includes approximately 190 hotels, motels and lodges, with over 5,300 rooms. The recent report, "A Program For Increasing The Economic Contribution Of Tourism," prepared by Cresap, McCormick and Paget, identified a need for doubling these accommodation facilities by 1975, and studies now being undertaken by a number of major hotel and motel operators may result in provision of the required facilities. To obtain multiseasonal use, a number of lodgings cater mainly to local construction crews during the summer season and to Alaskan hunters and fishermen during the season for these activities.

While the majority of facilities serving the Alaskan visitor are roadside-oriented, some of the larger hotels and motels in the major cities (Anchorage, Fairbanks, and Juneau) are situated in the downtown areas, and provide quarters for commercial travelers as well as tourists who travel by air. Several motel operations recently established in Ketchikan, Petersburg and Juneau are decidedly oriented toward attracting the visitor who arrives by ferry. Accommodations in isolated locations, such as Nome, Kotzebue and Barrow, cater almost 100 per cent to air travelers. Tourist accommodations and services along the highways of Alaska are spaced about 20 to 30 miles apart. Additional facilities are found at important highway junction points, unique areas of scenic interest, and locations that are known for good hunting and fishing.

Airline Service

The following scheduled U. S. flag airlines provide passenger service into Alaska from outside points: Pan American Airlines, Western Airlines, Northwest Orient Airlines, Wien Consolidated, and Alaska Airlines, In addition, international service is provided by British Overseas Airways, KLM, Lufthansa, Sabena, Scandanavian Airways, Japan Air Lines, and Air France. Wien Consolidated serves major cities in all but the Aleutian chain, which is served by Reeve Aleutian Airways. Alaska Airlines serves Southeastern Alaska plus Anchorage, Fairbanks, Nome and Kotzebue, while Western Airlines operates in both Southeastern and South Central Alaska.

Air taxi and charter operations take up the slack in intra-State travel, from landing the visitor on a glacier to setting him down in a remote lake to enjoy solitude and Alaska's outstanding fishing.

Recently, Alaska Airlines has combined the air transportation service it offers with tourist ground accommodations at locations such as Nome and Mount Alyeska, selling both elements together as a single package. Trends point toward a significant future increase in this combined package approach as a means of realizing a greater overall return on the private investment.

Cruise Ships

Summer tourist cruise ships plying the Inside Passage are operated by a number of companies. The Canadian National Steamship's "Prince George" operates on an eight-day schedule between Vancouver, British Columbia, and Skagway, Alaska, and return. The Canadian Pacific Railway's tour ship "Princess Patricia" operates on the same route on a 7-1/2-day schedule. Alaska Cruise Lines (Westours Inc.) operates three cruise ships, also from Vancouver, to Skagway and Haines and return; these ships are the "Polar Star," the "Yukon Star," and the "Glacier Queen." In 1969, cruise ship service was substantially increased through the addition of cruises operated by Matson Lines, Princess Lines, P&O Lines, and American President Lines.

Bus Service

A number of private operators, including Westours Inc., Northland Tours and Kneisel Tours, provide a full line of inclusive tours of Alaska utilizing buses as the primary means of travel and sightseeing. These tours have significantly increased in popularity in recent years.

C - PRINCIPAL RECREATION RESOURCES BY PLANNING REGION

This section describes the major recreation resources and presents basic inventories of areas and facilities in each of the State's five planning regions (defined in Chapter II). Additional recreation resources more easily discussed on a Statewide basis (such as wildlife and historic sites) are covered in greater detail in the next section of this chapter. For an explanation of the types of areas discussed, see page IV-2 of this chapter.

REGION I -

SOUTHEASTERN ALASKA

Alaska's Southeastern Region or "Panhandle" extends from Malaspina Glacier and Skagway on the north to Annette and Ketchikan roughly 400 miles to the south. Transportation within Southeastern Alaska is largely by ferry, skiff, fishing boat, cruiser, and scheduled and nonscheduled airlines.

The natural features of Southeastern Alaska are waterways, heavily forested islands, and the mountains which form and protect the famous Inside Passage. Huge retreating glaciers and sunken mountains have left behind beautiful fiords and straits.

Southeastern Alaska's recreational opportunities can generally be considered as oriented toward those activities occurring in an essentially natural environment, such as sightseeing, the study of nature and history, fishing, and hunting. Exhibits IV-8 and IV-9 present the inventories of areas and facilities devoted to recreation in Southeastern Alaska.

Climatic Conditions

The climate of Southeastern Alaska is mild but wet. Juneau has an average annual precipitation (including both rain and snow) of about 80 inches, and Ketchikan, about 150 inches annually. Weather is the factor inhibiting this region as a perfect vacation spot. Visitors must recognize that they may experience many rainy, cool and cloudy days, and that they may not wish to participate actively in outdoor recreation activities unless they have special equipment and accommodations. The relatively heavy use of "live aboard" vessels in Southeastern Alaska is evidence of the effect of the climate upon recreation patterns.

The Inside Passage

The Southeastern Region's most famous resource is the scenic Inside Passage. This 1,000-mile waterway, protected on both sides by the mountainous mainland and islands of the Alexander Archipelago, is a maze of

**SOUTHEASTERN REGION
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION**

NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION

TYPE OF CLASSIFICATION	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	TOTAL (a)
Basic Classification						
Land	16,678,814	406	506	21	264	16,680,011
Wetland	1,554,672	-	2	-	-	1,554,674
Fresh Water	787,564	6	114	1	-	787,685
TOTAL (a)	19,021,050	412	622	22	264	19,022,370
Bureau Of Outdoor Recreation Classification						
Class I (High Density Recreation Areas)	23	16	141	7	-	187
Class II (General Outdoor Recreation Areas)	5,701	334	48	10	250	6,343
Class III (Natural Environment Areas)	16,305,389	-	395	1	12	16,305,797
Class IV (Unique Natural Areas)	2,542,990	-	-	-	-	2,542,990
Class V (Primitive Areas)	166,600	-	4	2	-	166,606
Class VI (Historic And Cultural Sites)	193	62	-	-	-	255

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

SOUTHEASTERN REGION
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL	TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE			FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers							Other Outdoor Game Areas						
Number of areas	2	3	1	4	1	11	Number	-	-	1	-	1	2
Acreage	54*	62	1	10	n.a.	127*	Acreage	-	-	1	-	n.a.	1*
Lodges And Camps(a)							Outdoor Cultural And Sports Viewing Areas						
Buildings	1	-	-	3	4	8	Number of seats	-	-	100	300	-	400
Beds	n.a.	-	-	85	27	112	Acreage	-	-	n.a.	2	-	2*
Acreage	n.a.	-	-	3	n.a.	n.a.	Hockey, Figure And Speed Skating Rinks						
Cabins (Open To The Public)							Number	-	-	-	-	-	0
Buildings	152	2	-	-	19	173	Acreage	-	-	-	-	-	0
Beds	710	n.a.	-	-	61	771*	Toboggan, Sled, And Luge Hills						
Acreage	124*	n.a.	-	-	160*	284*	Number	-	-	-	1	-	1
Warm-Up Huts							Acreage	-	-	-	5	-	5
Buildings	-	-	-	-	-	0	Vertical descent (feet)	-	-	-	20	-	20
Simultaneous Capacity (b)	-	-	-	-	-	0	Ski Jumps						
Acreage	-	-	-	-	-	0	Number	-	-	-	-	-	0
Campgrounds - Developed Areas							Acreage	-	-	-	-	-	0
Number of campgrounds	10	5	-	1	-	16	Length (feet)	-	-	-	-	-	0
Number of campsites	158	52	-	10	-	220	Downhill Ski Slopes						
Acreage	77	292	-	2	-	371	Number	-	-	1	1	-	2
Campgrounds - Group Camping							Acreage	-	-	1	5	-	6
Beds	8	-	-	-	-	8	Slope length (feet)	-	-	30	20	-	50
Acreage	1	-	-	-	-	1	Vertical descent (feet)	-	-	-	-	-	0
Picnic Areas							Mechanical Ski Lifts						
Number of picnic areas	21	3	6	1	-	31	Number	-	-	-	2	-	2
Number of picnic units	145	24	25	3	-	197	Capacity per hour	-	-	-	1,000	-	1,000
Acreage	45*	24	4*	n.a.	-	73*	Length (feet)	-	-	-	n.a.	-	n.a.
Swimming Beaches (And Pools)							Vertical rise (feet)	-	-	-	n.a.	-	n.a.
Number	1	2	4	1	3	11	Trails						
Square feet	n.a.	n.a.	6,175	5,625	1,100*	12,900*	Cross country skiing (miles)	-	7	-	-	-	7
Frontage feet	n.a.	n.a.	-	-	-	n.a.	Hiking (miles)	306	45	2	-	20	373
Bathhouses							Horseback riding (miles)	-	39	-	-	-	39
Number of units	1	-	2	-	1	4	Canoeing (miles)	-	-	-	-	-	-
Rifle And Archery Ranges, Sneet And Trap Fields							Snowmobiling (miles)	-	-	-	3	-	3
Number	-	-	1	3	1	5	Bicycle paths (miles)	-	-	-	-	-	-
Acreage	-	-	n.a.	10	40	50*	Other (miles)	-	-	1	-	-	1
Golf Courses							TOTAL (MILES)(c)	306	45	3	3	20	377
Number of holes	-	-	-	-	-	0	Campgrounds - Remote Wilderness						
Acreage	-	-	-	-	-	0	Number of campgrounds	-	-	-	1	-	1
Tennis Courts							Number of campsites	-	-	-	75	-	75
Number	-	-	2	-	-	2	Acreage	-	-	-	n.a.	-	n.a.
Acreage	-	-	1	-	-	1	Scenic Turnouts And Roadside Rest Areas						
Baseball And Softball Diamonds							Number	-	4	-	-	4	8
Number	-	-	13	1	-	14	Parking spaces	-	n.a.	-	-	75	75*
Acreage	-	-	30*	3	-	33*	Boat Launching Ramps						
Football Fields							Launching spaces	8	3	9	1	-	21
Number	-	-	-	-	-	0	Acreage	n.a.	n.a.	7*	n.a.	-	n.a.
Acreage	-	-	-	-	-	0	Marina Slips						
Soccer Fields							Number of slips	1	67	611	33	2	714
Number	-	-	-	1	-	1	Moorings						
Acreage	-	-	-	3	-	3	Number of moorings	17	-	1,510	1	25	1,553
Track And Field Areas							Airstrips						
Number	-	-	-	-	-	0	Number of strips	-	-	1	1	2	4
Acreage	-	-	-	-	-	0	Runway length (feet)	-	-	5,000	4,500	1,000	10,500
Playgrounds													
Number	-	6	14	1	-	21							
Acreage	-	4	16*	3	-	23*							

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally.

Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

channels and fiords. The mountains rise precipitously from the water and are thickly covered with spruce, hemlock, and alder. The Inside Passage offers vacationers an opportunity to see some of the most dramatic and strikingly beautiful scenery in the world, while enjoying a restful water cruise protected from the discomforts of rough seas. Fishing villages, lumber camps and native villages dot the shores, and the spectator is able to stop at points of historic and scientific interest. Sitka deer, mountain goat, whales, porpoises, seals, waterbirds and occasionally the famous Alaska brown bear can be seen while traveling the Inside Passage.

Sitka And Glacier Bay National Monuments

The 54-acre Sitka National Monument, administered by the National Park Service, is a major historical attraction in Southeastern Alaska, combining elements of both Russian and Indian cultures. The Monument preserves the site of a stockade where the Tlingit Indians made their last stand against the Russian settlers.

Approximately 75 miles northwest of Juneau, the Southeastern Region's largest city (and the State's capital), is Glacier Bay National Monument, an area of approximately 3,600 square miles set aside to preserve the unique glacier features found in this part of the State. There are 20 major glaciers, and many smaller ones are found at the end of nearly every bay and inlet. Muir Glacier, the most famous, is a tremendously impressive giant, measuring nearly two miles across and rising 265 feet above the waterline.

Access to the Monument is limited to air and water transportation, with no highway system likely in the foreseeable future. As a result, only 8,000 people visited the Monument in 1967, a number much below the potential of the area. Facilities at the Monument, while small, are first-rate; the present lodge at Bartlett Cove is a beautiful structure and has received heavy use ever since its opening.

Tongass National Forest

Except for Glacier Bay National Monument, nearly all the rest of Southeastern Alaska is encompassed by the South and North Tongass National Forests, comprising 16 million acres.

The U. S. Forest Service takes careful consideration of recreation as one element in its multiple-use planning, and has tailored its recreation improvement program to retain the natural quality of the area. Only the minimum conveniences are provided: 130 public-use cabins are maintained in prime

hunting and fishing areas; picnic areas and campgrounds, designed for tents and trailers, are also available. The Forest Service maintains visitor information centers at Mendenhall Glacier near Juneau and at Totem Bight near Ketchikan. Two scenic areas have been set aside - the Tracy Arm - Ford's Terror Scenic Area, and the Walker Cove - Rudyerd Bay Scenic Area. Large areas have been dedicated to recreation near the Mendenhall Glacier and the Admiralty Lakes area on Admiralty Island. In addition to spectacular scenery, Indian villages and totem poles, historic evidence of Russian influence and ruins of gold mining operations are found throughout the Tongass.

Camping, Hunting And Fishing

Despite the weather conditions noted earlier, there is substantial local demand for campgrounds and picnic facilities. A number of such facilities, with shelters, have been provided by the U. S. Forest Service and the State along the short road systems in the vicinity of the region's major towns. The U. S. Forest Service, in cooperation with local sportsmen's organizations, has also constructed a number of small 4-man cabins with skiffs, and has placed them on selected lakes and waterways to promote the fishing, hunting, and general recreation use of these waters and the surrounding forests. These cabins have been very popular.

The Southeastern Region affords excellent Sitka deer hunting, as well as opportunities to take mountain goat, brown and black bear, and moose (in limited areas). Deer populations have reached such numbers that four deer (two of which may be antlerless) may be taken annually in most portions of Southeastern Alaska. The U. S. Forest Service and the State of Alaska have developed airstrips in the Yakutat area to encourage moose hunters to take animals in the more remote locations. Both are cooperating in placing cabins in the vicinity of these strips. The Stikine Flats offer outstanding waterfowl hunting opportunities; limits of game birds can often be taken without benefit of a blind.

The Southeastern Region is also famous for its saltwater fishing (for king and silver salmon, steelhead and sea-run Dolly Varden), as well as freshwater stream and lake fishing for rainbow and cutthroat trout. Most of the larger cities, and some smaller towns such as Craig, have "salmon derbies," generally taking place in May, June and August. Sportsmen from all over the United States come to compete for the substantial prizes offered for catching the largest fish.

Historic Attractions

Southeastern Alaska is also rich in relics of the days of the Russian occupation, the gold rush, and the lore of Indian civilizations. There are numerous Indian villages, some of which have only been recently touched by more sophisticated civilization, affording the traveler the experience of rubbing shoulders with an ancient culture.

Juneau, Skagway and other towns support museums of great importance to Alaska and to the heritage of the United States. In addition, there are abandoned townsites with false-front buildings, cemeteries and stampede trails, acting as reminders of the past. All are recreation attractions.

REGION 2 -

SOUTH CENTRAL ALASKA

The South Central Region is a virtual paradise for the outdoor sportsman. It has rugged, deeply eroded mountains capped by snowclad peaks, extensive ice fields and glaciers, expanses of lowland spruce forest and tundra plateau, as well as lakes, rivers and streams of all types and descriptions. The region covers all the area south of the Alaska Range, from the Canadian border to the Aniakchak Crater 200 miles down the Alaska Peninsula. Anchorage, the State's largest city, is the metropolitan center for this region, the most populous in Alaska.

Access in the South Central Region is the best to be found in Alaska; the region has the major share of the State's highway mileage, good ferry service to Kodiak Island and Prince William Sound, and readily available commercial and private air service.

Scenic highway tours offer spectacular vistas and the opportunity to visit areas of historic interest associated with the Russian era, or to gain first-hand experience of the gold mining, copper mining, and salmon canning industries. The major roads in the region are hard-surfaced and heavily traveled; secondary roads provide access into a considerable portion of the forest and lake country in the Palmer-Wasilla and Kenai areas. The weather is warm and relatively clear throughout the summer, with a climate not unlike that of the North Central United States.

The South Central Region provides opportunities for almost unlimited outdoor recreation, including hunting, fishing, sightseeing, hiking, history and nature study, mountain climbing, skiing, gold panning, and many other activities. Exhibits IV-10 and IV-11 present the inventories of the region's recreation areas and facilities.

SOUTH CENTRAL REGION
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION

NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION

TYPE OF CLASSIFICATION	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	TOTAL (a)
Basic Classification						
Land	7,274,031	14,640	1,364	1,498	7,437	7,298,970
Wetland	753,510	5,021	5	77	97	758,710
Fresh Water	318,910	4,338	20	72	89	323,429
TOTAL (a)	8,346,451	23,999	1,389	1,647	7,623	8,381,109

Bureau Of Outdoor Recreation Classification

Class I (High Density Recreation Areas)	274	1	749	9	348	1,381
Class II (General Outdoor Recreation Areas)	62,789	23,077	519	916	1,567	88,868
Class III (Natural Environment Areas)	7,349,275	919	111	522	4,850	7,355,677
Class IV (Unique Natural Areas)	100,881	-	-	90	91	101,062
Class V (Primitive Areas)	833,098	-	-	-	486	833,584
Class VI (Historic And Cultural Sites)	0	-	-	100	-	100

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

**SOUTH CENTRAL REGION
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS**

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers						
Number of areas	3	2	5	5	22	38
Acreage	2*	n.a.	178	5	32*	217*
Lodges And Camps (a)						
Buildings	-	-	-	-	80	80
Beds	-	-	-	-	744*	744*
Acreage	-	-	-	-	608*	608*
Cabins (Open To The Public)						
Buildings	58*	-	1	9	201	269*
Beds	689*	-	10	30	732*	1,461*
Acreage	73*	-	12	n.a.	396*	481*
Warm-Up Huts						
Buildings	1	-	2	2	6	11
Simultaneous Capacity (b)	500	-	170	50*	150*	870*
Acreage	2	-	1*	n.a.	1*	4*
Campgrounds - Developed Areas						
Number of campgrounds	38	29	10	5	33	115
Number of campsites	586	387	118*	77	283*	1,451*
Acreage	302*	1,883	21*	213*	46*	2,465*
Campgrounds - Group Camping						
Beds	-	-	-	295	17	312
Acreage	-	-	-	209	n.a.	209*
Picnic Areas						
Number of picnic areas	45	30	20	1	46*	142*
Number of picnic units	121	195	108*	10	2,091	2,525*
Acreage	29*	127*	40*	20	43*	259*
Swimming Beaches (And Pools)						
Number	2	4	5	5	9	25
Square feet	9,000	n.a.	300*	2,950*	5,490*	17,740*
Frontage feet	-	230*	600*	-	1,400*	2,250*
Bathhouses						
Number of units	2	-	7	5	10	24
Rifle And Archery Ranges, Skeet And Trap Fields						
Number	3	-	-	1	4	8
Acreage	3*	-	-	n.a.	5*	8*
Golf Courses						
Number of holes	18	-	-	-	9	27
Acreage	87	-	-	-	65	152
Tennis Courts						
Number	8	-	15	4	-	27
Acreage	7	-	7*	1	-	15*
Baseball And Softball Diamonds						
Number	15	-	39	1	-	55
Acreage	65	-	14*	2	-	81*
Football Fields						
Number	2	-	3	1	-	6
Acreage	10	-	2*	2	-	14*
Soccer Fields						
Number	1	-	2	-	-	3
Acreage	n.a.	-	1*	-	-	1*
Track And Field Areas						
Number	2	-	1	-	-	3
Acreage	n.a.	-	n.a.	-	-	n.a.
Playgrounds						
Number	22	3	47	4	1	77
Acreage	21*	2	18*	n.a.	2	43*

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Other Outdoor Game Areas						
Number	-	-	12	1	2	15
Acreage	-	-	n.a.	n.a.	n.a.	n.a.
Outdoor Cultural And Sports Viewing Areas						
Number of seats	-	-	1,530	n.a.	-	1,530*
Acreage	-	-	8	2	-	8
Hockey, Figure And Speed Skating Rinks						
Number	17	-	36	2	4	59
Acreage*	5*	-	6*	2	5	18*
Toboggan, Sled, And Luge Hills						
Number	1	-	1	-	2	4
Acreage	5	-	1	-	402	408
Vertical descent (feet)	100	-	n.a.	-	n.a.	100*
Ski Jumps						
Number	2	-	1	1	1	5
Acreage	1*	-	n.a.	70	3	74
Length (feet)	60	-	20	n.a.	n.a.	80*
Downhill Ski Slopes						
Number	7	-	1	3	12	23
Acreage	701	-	n.a.	7	250	958*
Slope length (feet)	3,460*	-	n.a.	1,150	21,900*	25,510*
Vertical descent (feet)	-	-	-	-	-	-
Mechanical Ski Lifts						
Number	12	-	1	3	7	23
Capacity per hour	7,860*	-	n.a.	1,450*	2,700	12,010*
Length (feet)	9,910*	-	n.a.	950*	11,900	22,760*
Vertical rise (feet)	1,231*	-	n.a.	320*	2,950	4,501*
Trails						
Cross country skiing (miles)	230	-	25	-	36	291
Hiking (miles)	260	7	9	1	29	306
Horseback riding (miles)	48	-	5	-	12	65
Canoeing (miles)	230	-	-	2	-	232
Snowmobiling (miles)	230	-	5	-	71	306
Bicycle paths (miles)	-	-	4	-	-	4
Other (miles)	-	-	-	-	6	6
TOTAL (MILES)(c)	458	7	29	3	115	612
Campgrounds - Remote Wilderness						
Number of campgrounds	7	-	-	-	7	14
Number of campsites	130	-	-	-	240	370
Acreage	10	-	-	-	13*	23*
Scenic Turnouts And Roadside Rest Areas						
Number	-	13	5	-	3	21
Parking spaces	-	216	30	-	n.a.	246*
Boat Launching Ramps						
Launching spaces	14	18	6	1	18	57
Acreage	14*	1*	1*	n.a.	7*	23*
Marina Slips						
Number of slips	91	-	595	-	119	805
Moorings						
Number of moorings	41	5	1	1	97	145
Airstrips						
Number of strips	3	-	1	-	15	19
Runway length (feet)	2,500*	-	4,800	-	19,702*	27,002*

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally. Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

Wild Game

The lowlands contain heavy populations of moose, and upper mountain areas support harvestable populations of Dall sheep and mountain goats. Black bear and brown bear are also found throughout the region. Because of the present limited access to the hinterlands, hunting pressures for these species along the road system are very heavy. The big game hunter can still get away from crowded hunting conditions, however, by getting back in the bush, where hunting is not only more enjoyable but more productive. Grouse, rabbits, and ptarmigan are hunted throughout the South Central Region, and waterfowl hunting in the vicinity of Cook Inlet is an important recreation attraction of that area.

One of the region's major attractions, the Kenai National Moose Range, was created to protect an important part of South Central Alaska's wildlife resources. The Range itself encompasses 2,894 square miles and is located on the Kenai Peninsula, south of Anchorage. Further south, on Kodiak Island, the Kodiak National Wildlife Refuge is a major protected habitat for brown bears, largest of all North American carnivores.

Fishing

Sport fishing is also outstanding in the South Central Region. The lowland lakes and rivers contain rainbow and Dolly Varden trout, while grayling and lake trout can be found in the vicinity of the Nelchina Plateau. King salmon, silver salmon, sea-run Dolly Varden, and steelhead (as well as the other species of Pacific salmon) run up the major streams and rivers of the area. Saltwater fishing is available from Homer, Seward, and the Kodiak vicinity.

Because of relatively limited access to high-quality fishing waters, fishing pressures along the road systems, like hunting pressures, are extremely heavy, comparable in many cases to those found on many of the more popular lakes and streams in the other 49 states.

The lakes of the Kenai and Susitna Flats, as well as many in the Nelchina Plateau and the Alaska Range, are being intensively developed. Cabins, homesites, and private tenting areas are found almost everywhere that a road touches a lake. The more desirable locations on "fly-in" lakes have also been claimed for private recreation use and development.

Nancy Lake

The South Central Region includes the Nancy Lake State Recreation Area, 66 miles north of Anchorage, which is being developed to serve a wide variety of recreation demands such as boating, hiking, sailing, ice skating, camping

and picnicking. When completed in 1980, this 21,127-acre complex will provide 1,750 camping units, 485 lodge, cabin and tent units, 2,500 picnic sites, access to 12 fishing lakes, and 4,200 acres for boating, sailing, swimming and water skiing.

Scenic And Historic Attractions

A number of interesting and unique attractions are found in this region. Lake George, 44 miles from Anchorage, is a world-renowned self-dumping lake. Each winter, as Knik Glacier advances against the Chugach Mountains, it seals off the outlet to Lake George. The following summer, as the melting snow of the Lake George watershed raises the water level, the overfilled lake pours over the glacier dam, carving immense blocks of ice from the face of the glacier.

The scenic drive through Keystone Canyon is also an exciting experience, with its waterfalls and towering vertical walls. An enthusiast can also play on Worthington Glacier, enjoy the history and evoke the spirit of the ghost towns of Chitina or McCarthy, and hike through mountain passes. Not far east of Anchorage is beautiful Prince William Sound, with its mountains rising 10,000 feet from the shoreline and its many glaciers.

REGION 3 -

SOUTHWESTERN ALASKA

The Southwestern Region extends west from the Alaska Range, encompassing the Alaska Peninsula, the Aleutian and Pribilof Islands, and points as far north as Norton Sound. This remote area of more than 150,000 square miles contains only 28,875 people (roughly 5 square miles per person), and for the most part can be reached only by air. Southwestern Alaska is generally composed of mountains and tundra from one end to the other, and much of it is treeless. Inventories of the region's recreation areas and facilities are presented in Exhibits IV-12 and IV-13.

Southwestern Alaska is one of the State's most underutilized recreation areas. Two of the factors contributing to this situation are the large population of Aleuts and Indians living on bare subsistence with little time or money for recreation, plus the lack of transportation facilities. By comparison, the Northwestern Region, where the situation is similar, has been promoted by private enterprise as a major attraction and is beginning to experience an important increase in tourism.

**SOUTHWESTERN REGION
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION**

TYPE OF CLASSIFICATION	NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION					TOTAL (a)
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Basic Classification						
Land	7,854,513	-	15	-	343	7,854,871
Wetland	484,134	-	-	-	6	484,140
Fresh Water	1,749,192	-	-	-	2	1,749,194
TOTAL (a)	10,087,839	-	15	-	351	10,088,205
Bureau Of Outdoor Recreation Classification						
Class I (High Density Recreation Areas)	-	-	-	-	1	1
Class II (General Outdoor Recreation Areas)	200	-	15	-	164	379
Class III (Natural Environment Areas)	5,188,523	-	-	-	-	5,188,523
Class IV (Unique Natural Areas)	781,590	-	-	-	10	781,600
Class V (Primitive Areas)	4,108,590	-	-	-	206	4,108,796
Class VI (Historic And Cultural Sites)	2,100	-	-	-	-	2,100

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

SOUTHWESTERN REGION
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL	TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE			FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers							Other Outdoor Game Areas						
Number of areas	2	-	-	-	-	2	Number	1	-	1	-	2	
Acreage	n.a.	-	-	-	-	n.a.	Acreage	10	-	n.a.	-	10*	
Lodges And Camps(a)							Outdoor Cultural And Sports Viewing Areas						
Buildings	13	-	1	-	11	25	Number of seats	-	-	-	-	0	
Beds	45	-	12	-	78*	135*	Acreage	-	-	-	-	0	
Acreage	n.a.	-	1	-	14*	15*	Hockey, Figure And Speed Skating Rinks						
Cabins (Open To The Public)							Number	-	-	-	-	0	
Buildings	3	-	-	-	31	34	Acreage	-	-	-	-	0	
Beds	12	-	-	-	113	125	Toboggan, Sled, And Luge Hills						
Acreage	6	-	-	-	154	160	Number	-	-	-	-	0	
Warm-Up Huts							Acreage	-	-	-	-	0	
Buildings	-	-	-	-	-	0	Vertical descent (feet)	-	-	-	-	-	
Simultaneous Capacity (b)	-	-	-	-	-	0	Ski Jumps						
Acreage	-	-	-	-	-	0	Number	-	-	-	-	0	
Camgrounds - Developed Areas							Acreage	-	-	-	-	0	
Number of camgrounds	1	-	-	-	-	1	Length (feet)	-	-	-	-	0	
Number of campsites	4	-	-	-	-	4	Downhill Ski Slopes						
Acreage	n.a.	-	-	-	-	n.a.	Number	-	-	-	-	0	
Camgrounds - Group Camping							Acreage	-	-	-	-	0	
Beds	-	-	-	-	5	5	Slope length (feet)	-	-	-	-	0	
Acreage	-	-	-	-	n.a.	n.a.	Vertical descent (feet)	-	-	-	-	0	
Picnic Areas							Mechanical Ski Lifts						
Number of picnic areas	4	-	1	-	-	5	Number	-	-	-	-	0	
Number of picnic units	7	-	3	-	-	10	Capacity per hour	-	-	-	-	0	
Acreage	2*	-	10	-	-	12*	Length (feet)	-	-	-	-	0	
Swimming Beaches (And Pools)							Vertical rise (feet)	-	-	-	-	0	
Number	-	-	1	-	1	2	Traits						
Square feet	-	-	600	-	1,290	1,890	Cross country skiing (miles)	-	-	-	-	0	
Frontage feet	-	-	200	-	-	200	Hiking (miles)	28	-	-	-	28	
Bathhouses							Horseback riding (miles)	-	-	-	-	0	
Number of units	-	-	2	-	-	2	Canoeing (miles)	-	-	-	-	0	
Rifle And Archery Ranges, Skeeet And Trap Fields							Snowmobiling (miles)	-	-	-	-	0	
Number	1	-	-	-	-	1	Bicycle paths (miles)	-	-	-	-	0	
Acreage	3	-	-	-	-	3	Other (miles)	-	-	-	-	0	
Golf Courses							TOTAL (MILES) (c)	28	-	-	-	28	
Number of holes	-	-	-	-	-	0	Camgrounds - Remote Wilderness						
Acreage	-	-	-	-	-	0	Number of camgrounds	-	-	-	-	0	
Tennis Courts							Number of campsites	-	-	-	-	0	
Number	-	-	-	-	-	0	Acreage	-	-	-	-	0	
Acreage	-	-	-	-	-	0	Scenic Turnouts And Roadside Rest Areas						
Baseball And Softball Diamonds							Number	-	-	-	-	0	
Number	2	-	1	-	-	3	Parking spaces	-	-	-	-	0	
Acreage	2	-	1	-	-	3	Boat Launching Ramps						
Football Fields							Launching spaces	-	-	-	-	0	
Number	-	-	-	-	-	0	Acreage	-	-	-	-	0	
Acreage	-	-	-	-	-	0	Marina Slips						
Soccer Fields							Number of slips	-	-	-	-	0	
Number	-	-	-	-	-	0	Moorings						
Acreage	-	-	-	-	-	0	Number of moorings	-	-	-	1	1	
Track And Field Areas							Airstrips						
Number	-	-	-	-	-	0	Number of strips	-	-	1	-	1	
Acreage	-	-	-	-	-	0	Runway length (feet)	-	-	4,000	-	3,000	7,000
Playgrounds													
Number	-	-	7	-	-	7							
Acreage	-	-	3*	-	-	3*							

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally. Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

Katmai National Monument

The Katmai National Monument, with 2,800,000 acres, is the largest single Monument administered by the National Park Service. It was established to preserve the volcanic and lava features associated with Katmai Volcano and the Valley of Ten Thousand Smokes, scene of a violent eruption in 1912.

The Monument contains basic trails and vista sites, as well as two tent camps operated between June and October by Wien Consolidated Airlines. Because access to the Monument is almost entirely by air, the annual rate of visitors tends to be quite low - approximately 1,000 persons in 1968.

Wildlife Refuges

The Southwestern Region is also the location of a majority of Alaska's National Wildlife Refuges. East of Katmai, lying along the seacoast and on Nunivak Island, are the Clarence Rhode, Hazen Bay, and Nunivak National Wildlife Refuges, totaling 3,724,000 acres. These refuges protect a variety of game, including musk oxen, sea birds and other sea life. To the west and south are the Izembeck, Simeonof, Bogosolof, Aleutian, Bering Sea and Pribilof Refuges, with protected habitats for seals, sea otter, sea lions, a wide range of waterfowl, caribou, and a number of carnivores such as the brown bear.

Pribilof Islands

The Pribilof Islands are a unique tourist attraction. Special excursions to view the fur seal herds have long been a featured offering of Reeve Aleutian Airways. The story of the fur seal migrations, their early destructive exploitation, and their later rehabilitation and management on a sustained yield basis, constitutes an interesting and important chapter in United States conservation. Walt Disney launched his famous True Life Adventure series with the now classic "Seal Island," which documented the life of the fur seal on these islands.

Aleutian Islands

The Aleutian Islands have major appeal to the rugged outdoorsman. They are a rather inhospitable chain of islands of tundra and barren volcanic mountains. The climate is moderate, but almost continuously overcast, with constant drizzle and frequent winds and squalls. The recreation potential of this part of Alaska is largely limited by the difficulty of access. The sites of important battles in World War II may one day be of historic interest.

Fishing And Lake Scenery

There is unparalleled fishing in parts of Southwestern Alaska during certain seasons of the year for rainbow, Dolly Varden, and Mackinaw trout, sockeye and king salmon, steelhead and grayling. These fishing opportunities have given rise to the successful operation of a string of fish camps by a local airline. Freshwater fishing is also possible at a number of other areas on the Alaska Peninsula, together with opportunities for big game hunting. Iliamna Lake, the State's largest lake, offers mountain scenery and splendid sport fishing, and the Wood River - Tikchik Lakes country above Dillingham (which has been under consideration for establishment as a State Park) is believed by many Alaskans to combine the finest features of Alaska's outdoor recreation resources.

REGION 4 - INTERIOR ALASKA

Interior Alaska lies between the Alaska Range and the Brooks Range, extending from the Canadian border almost to the Bering Sea. It is a vast area with high plateaus, parts of the Brooks Range, large tundras, and isolated groups of mountains. The Yukon River, with its scenic valleys and tributaries, splits the region nearly in half.

Basic air, highway, rail and river transportation systems combine to provide limited access to camping areas, lakes, historic sites and the Yukon River. For many visitors, this area is a primary destination because Fairbanks, its major population center, marks the end of the 1,529-mile Alaska Highway. Exhibits IV-14 and IV-15 present inventories of the region's recreation areas and facilities.

Climatic Conditions

The climate of Interior Alaska, with its dry-cold, windless winters and its long, hot summer days, is well suited to outdoor recreation the year round. Interior Alaska contains some extremely important recreation resources, including large primitive areas and Mt. McKinley National Park.

**INTERIOR REGION
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION**

TYPE OF CLASSIFICATION	NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION					
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	TOTAL (a)
Basic Classification						
Land	1,768,252	15,570	147	47	2,394	1,786,590
Wetland	166,402	1,500	-	-	8	167,910
Fresh Water	6,359	20	-	-	3	6,382
TOTAL (a)	1,941,013	17,270	147	47	2,405	1,960,882
Bureau Of Outdoor Recreation Classification						
Class I (High Density Recreation Areas)	172	1	33	-	754	960
Class II (General Outdoor Recreation Areas)	2,751	2,769	52	47	1,238	6,857
Class III (Natural Environment Areas)	204,984	14,500	-	-	59	219,534
Class IV (Unique Natural Areas)	265,100	-	-	-	285	265,385
Class V (Primitive Areas)	1,468,000	-	21	-	48	1,468,069
Class VI (Historic And Cultural Sites)	0	-	41	-	-	41

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

INTERIOR REGION
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL	TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE			FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers							Other Outdoor Game Areas						
Number of areas	2	3	2	-	2	9	Number	-	-	1	-	1	2
Acreage	n.a.	1*	61	-	n.a.	62*	Acreage	-	-	1	-	n.a.	1*
Lodges And Camps(a)							Outdoor Cultural And Sports Viewing Areas						
Buildings	1	-	-	-	51	52	Number of seats	-	-	3,000	-	-	3,000
Beds	180	-	-	-	368	548	Acreage	-	-	10	-	-	10
Acreage	n.a.	-	-	-	280*	280*	Hockey, Figure And Speed Skating Rinks						
Cabins (Open To The Public)							Number	3	-	1	-	-	4
Buildings	4	-	-	-	93	97	Acreage	501	-	1	-	-	502
Beds	64	-	-	-	264	328	Toboggan, Sled, And Luge Hills						
Acreage	n.a.	-	-	-	197	197*	Number	2	1	-	-	-	3
Warm-Up Huts							Acreage	6	1	-	-	-	7
Buildings	3	-	-	1	1	5	Vertical descent (feet)	282	50	-	-	-	332
Simultaneous Capacity(b)	55	-	-	100	30	185	Ski Jumps						
Acreage	45*	-	-	5	n.a.	50*	Number	-	1	-	-	-	1
Campgrounds - Developed Areas							Acreage	-	45	-	-	-	45
Number of campgrounds	21	22	-	-	11	54	Length (feet)	-	n.a.	-	-	-	n.a.
Number of campsites	325	168	-	-	197*	691*	Downhill Ski Slopes						
Acreage	191*	990	-	-	21*	1,202*	Number	2	1	-	-	21	24
Campgrounds - Group Camping							Acreage	75	5	-	-	720*	800*
Beds	-	-	-	-	-	-	Slope length (feet)	7,050	n.a.	-	-	9,000*	16,050*
Acreage	-	-	-	-	-	-	Vertical descent (feet)	-	n.a.	-	-	-	n.a.
Picnic Areas							Mechanical Ski Lifts						
Number of picnic areas	6	16	1	-	8*	31*	Number	3	1	-	-	5	9
Number of picnic units	52	62	8	-	35	157	Capacity per hour	3,620	200	-	-	2,300	6,120
Acreage	3*	1*	5	-	10*	19*	Length (feet)	6,900	n.a.	-	-	9,600	16,500*
Swimming Beaches (And Pools)							Vertical rise (feet)	1,425	n.a.	-	-	2,300	3,725*
Number	3	5	1	-	4	13	Trails						
Square feet	14,000	3,375*	1,800	-	452	19,627*	Cross country skiing (miles)	-	19	-	-	-	19
Frontage feet	350	300	-	-	300	950	Hiking (miles)	39	7	-	-	8	54
Bathhouses							Horseback riding (miles)	-	7	-	-	-	7
Number of units	-	2	-	-	14	16	Canoeing (miles)	125	-	-	-	12	137
Rifle And Archery Ranges, Skeeet And Trap Fields							Snowmobiling (miles)	-	50	-	-	-	50
Number	2	-	-	-	3	5	Bicycle paths (miles)	-	-	-	-	-	0
Acreage	3*	-	-	-	n.a.	3*	Other (miles)	-	-	-	34	-	34
Golf Courses							TOTAL (MILES)(c)	39	60	-	34	20	153
Number of holes	9	-	-	-	-	9	Campgrounds - Remote Wilderness						
Acreage	n.a.	-	-	-	-	n.a.	Number of campgrounds	-	-	-	-	1	1
Tennis Courts							Number of campsites	-	-	-	-	20	20
Number	12	2	-	-	-	14	Acreage	-	-	-	-	4	4
Acreage	11	1	-	-	-	12	Scenic Turnouts And Roadside Rest Areas						
Baseball And Softball Diamonds							Number	7	11	-	-	1	19
Number	10	-	6	-	-	16	Parking spaces	50	159	-	-	-	209
Acreage	50	-	18	-	-	68	Boat Launching Ramps						
Football Fields							Launching spaces	19	7	-	-	3	29
Number	3	-	-	-	-	3	Acreage	8*	n.a.	-	-	n.a.	n.a.
Acreage	15	-	-	-	-	15	Marina Slips						
Soccer Fields							Number of slips	-	-	1	-	-	1
Number	-	-	-	-	-	0	Moorings						
Acreage	-	-	-	-	-	0	Number of moorings	2	-	-	-	-	2
Track And Field Areas							Airstrips						
Number	1	-	-	-	-	1	Number of strips	1	-	1	-	8	10
Acreage	n.a.	-	-	-	-	n.a.	Runway length (feet)	3,000	-	2,900	-	12,300*	18,200*
Playgrounds													
Number	55	1	-	-	4	60							
Acreage	55	1	-	-	7	63							

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally. Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

The Yukon Basin

Between the Brooks Range and the White Mountains lies the Yukon Basin, an unusually large lowland area that would become a gigantic man-made lake if the Rampart Dam Project is developed. This flat marshy area contains a variety of gamebirds and big game animals (such as moose), as well as the previously mentioned summertime plague of mosquitos. This Basin is also the home of Alaska's Athabascan Indians, a tribe with a unique economic and cultural environment.

Mt. McKinley National Park

Mt. McKinley National Park is generally recognized as Alaska's most significant tourist attraction and is the State's prime symbol. The Park covers nearly 2,000,000 acres and has seasonal overnight accommodations, including the 56-room McKinley Hotel built by the National Park Service and now leased to a concessionaire. Other facilities include scenic roads, campgrounds, and an extensive system of hiking trails. Access to the Park is principally by rail and highway, with some access by air.

In addition to Mt. McKinley itself, there are surrounding peaks and many glaciers. Exposure to the Park's wide variety of wildlife, such as Dall sheep, moose, grizzly bears, wolves, wolverines and lynx, makes a visit to the Park a truly memorable occasion.

REGION 5 - NORTHWESTERN ALASKA

The Northwestern Region of Alaska consists of all of the State north of Norton Sound and the Brooks Range, west from the Canadian border to the Arctic Ocean. The terrain includes the Seward Peninsula, much of the Brooks Range, and thousands of square miles of tundra. The inventories of Northwestern Alaska's recreation areas and facilities are presented in Exhibits IV-16 and IV-17.

The Arctic

Northwestern Alaska is synonymous with the Eskimo culture and the Arctic. This area, the only place in the world where the Arctic can be visited in comfort on regular tours, received more than 10,000 tourist visits in 1967. Here, the tourist is able to observe the Eskimos practicing their arts of carving and skin sewing. During the summer, the visitor can also experience Point Barrow's long summer day, when the sun does not set between May 11th and August 2nd. Large floating gold dredges in the vicinity of Nome are also an attraction.

**NORTHWESTERN REGION
ACREAGES AND CLASSIFICATION OF AREAS WITH
MANAGEMENT OBJECTIVES THAT INCLUDE RECREATION**

TYPE OF CLASSIFICATION	NUMBER OF ACRES, BY LEVEL OF ADMINISTRATION					TOTAL (a)
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Basic Classification						
Land	8,901,101	-	1	-	120	8,901,222
Wetland	-	-	-	-	-	0
Fresh Water	5	-	-	-	-	5
TOTAL (a)	8,901,106	-	1	-	120	8,901,227
Bureau Of Outdoor Recreation Classification						
Class I (High Density Recreation Areas)	-	-	1	-	-	1
Class II (General Outdoor Recreation Areas)	-	-	-	-	120	120
Class III (Natural Environment Areas)	255	-	-	-	-	255
Class IV (Unique Natural Areas)	-	-	-	-	-	-
Class V (Primitive Areas)	8,900,641	-	-	-	5	8,900,646
Class VI (Historic And Cultural Sites)	200	-	-	-	-	200

(a) Because inventory forms were not always filled out in detail, totals for the two sets of classifications do not always agree exactly.

Note: Public domain under the Bureau of Land Management is excluded from this tabulation, because it may be subject to appropriation for purposes other than recreation after the land freeze ends. Multiple-use classifications under the Bureau of Land Management are also excluded, pending whatever final implementation of classification authority may be recommended by the Public Land Law Review Commission.

NORTHWESTERN REGION
INVENTORY OF OUTDOOR RECREATION FACILITIES AND AREAS

TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL	TYPE OF FACILITY	LEVEL OF ADMINISTRATION					TOTAL
	FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE			FEDERAL	STATE	LOCAL	QUASI-PUBLIC	PRIVATE	
Historic And Natural Sites And Visitor Centers							Other Outdoor Game Areas						
Number of areas	-	-	2	-	-	2	Number	-	-	-	-	-	0
Acreage	-	-	n.a.	-	-	n.a.	Acreage	-	-	-	-	-	0
Lodges And Camps(a)							Outdoor Cultural And Sports Viewing Areas						
Buildings	-	-	-	-	1	1	Number of seats	-	-	-	-	-	0
Beds	-	-	-	-	115	115	Acreage	-	-	-	-	-	0
Acreage	-	-	-	-	n.a.	n.a.	Hockey, Figure And Speed Skating Rinks						
Cabins (Open To The Public)							Number	-	-	-	-	-	0
Buildings	-	-	-	-	3	3	Acreage	-	-	-	-	-	0
Beds	-	-	-	-	6*	6*	Toboggan, Sled, And Luge Hills						
Acreage	-	-	-	-	5*	5*	Number	-	-	-	-	-	0
Warm-Up Huts							Acreage	-	-	-	-	-	0
Buildings	-	-	1	-	-	1	Vertical descent (feet)	-	-	-	-	-	-
Simultaneous Capacity(b)	-	-	n.a.	-	-	n.a.	Ski Jumps						
Acreage	-	-	n.a.	-	-	n.a.	Number	-	-	-	-	-	0
Campgrounds - Developed Areas							Acreage	-	-	-	-	-	0
Number of campgrounds	1	-	-	-	-	1	Length (feet)	-	-	-	-	-	0
Number of campsites	4	-	-	-	-	4	Downhill Ski Slopes						
Acreage	10	-	-	-	-	10	Number	-	-	-	-	-	0
Campgrounds - Group Camping							Acreage	-	-	-	-	-	0
Beds	-	-	-	-	-	0	Slope length (feet)	-	-	-	-	-	0
Acreage	-	-	-	-	-	0	Vertical descent (feet)	-	-	-	-	-	0
Picnic Areas							Mechanical Ski Lifts						
Number of picnic areas	-	-	-	-	-	0	Number	-	-	-	-	-	0
Number of picnic units	-	-	-	-	-	0	Capacity per hour	-	-	-	-	-	0
Acreage	-	-	-	-	-	0	Length (feet)	-	-	-	-	-	0
Swimming Beaches (And Pools)							Vertical rise (feet)	-	-	-	-	-	0
Number	-	-	-	-	-	0	Trails						
Square feet	-	-	-	-	-	0	Cross country skiing (miles)	-	-	-	-	-	0
Frontage feet	-	-	-	-	-	0	Hiking (miles)	-	-	-	-	-	0
Bathhouses							Horseback riding (miles)	-	-	-	-	-	0
Number of units	-	-	-	-	-	0	Canoeing (miles)	-	-	-	30	30	
Rifle And Archery Ranges, Skeeet And Trap Fields							Snowmobiling (miles)	-	-	-	-	-	0
Number	-	-	1	-	-	1	Bicycle paths (miles)	-	-	-	-	-	0
Acreage	n.a.	-	-	-	-	n.a.	Other (miles)	-	-	-	-	-	0
Golf Courses							TOTAL (MILES)(c)					30	30
Number of holes	-	-	-	-	-	0	Campgrounds - Remote Wilderness						
Acreage	-	-	-	-	-	0	Number of campgrounds	-	-	-	-	-	0
Tennis Courts							Number of campsites	-	-	-	-	-	0
Number	-	-	-	-	-	0	Acreage	-	-	-	-	-	0
Acreage	-	-	-	-	-	0	Scenic Turnouts And Roadside Rest Areas						
Baseball And Softball Diamonds							Number	-	-	-	-	-	0
Number	-	-	1	-	-	1	Parking spaces	-	-	-	-	-	0
Acreage	-	-	1	-	-	1	Boat Launching Ramps						
Football Fields							Launching spaces	-	-	-	-	-	0
Number	-	-	-	-	-	0	Acreage	-	-	-	-	-	0
Acreage	-	-	-	-	-	0	Marina Slips						
Soccer Fields							Number of slips	-	-	-	-	-	0
Number	-	-	-	-	-	0	Moorings						
Acreage	-	-	-	-	-	0	Number of moorings	-	-	-	-	-	0
Track And Field Areas							Airstrips						
Number	-	-	-	-	-	0	Number of strips	-	-	-	-	-	0
Acreage	-	-	-	-	-	0	Runway length (feet)	-	-	-	-	-	0
Playgrounds													
Number	-	-	2	-	-	2							
Acreage	-	-	1	-	-	1							

n.a. - not available.

* Because inventory forms were not always filled out in detail, these numbers are totals of the figures provided, rather than a complete tally. Most of the omissions are of little significance, but caution should be exercised in attempting to develop ratios (acres per visitor center, picnic units per acre, etc.)

(a) Includes only lodges and camps which are closely connected with outdoor recreation, such as fishing camps or hunting lodges; does not include major hotels and motels such as those found in downtown urban areas.

(b) Simultaneous capacity is defined as the number of people which the facility can normally be expected to accommodate at one time.

(c) Totals are not necessarily cumulative because of multiple use of some trails.

Arctic National Wildlife Refuge

North and east of Fairbanks on the Arctic Sea and bordering Canada is the Arctic National Wildlife Refuge of roughly 9,000,000 acres. This is a biologically self-sufficient game area almost entirely untouched by man, with an unlimited variety of game from Beluga whales to Dall sheep.

Brooks Range And Arctic Slope

The Brooks Range and the Arctic Slope constitute a rugged, largely uninhabited range of mountains and muskeg extending across the top third of Alaska. The Arctic Slope is a grassy area covered with thousands of small muskeg lakes; it is generally without timber, but has willow and alder brush in the draws along the rivers. The mountains of the Brooks Range rise to an elevation of 9,200 feet, and in places are eroded to an extent that makes them the most rugged and awesome mountains in Alaska. Noncommercial timber is found in the lower valleys on the south slope of the Brooks Range.

The primitive and rugged physiography of the Brooks Range offers a great recreation potential. There are about a dozen major lakes in the central and eastern portion of the Range which offer outstanding grayling and lake trout fishing, as well as excellent, highly scenic campsites for hunters seeking brown bear, mountain sheep, moose and caribou. This is one of the few places in the United States where one can still experience untouched wilderness, although each year heavier use is being made of this area by guide and bush operators serving predominantly out-of-State hunters and tourists.

Off the western coast of this region, polar bear and walrus are rapidly becoming a major attraction to the affluent hunter from the other states; transportation is largely confined to aircraft (for sightseeing) and umiak (open skin boats). In addition, thousands of caribou are found on the northwest slope - so numerous that the hunting season is never closed and no limits have been established.

D - STATEWIDE AND ADJACENT RECREATION RESOURCES

This section focuses on the resources and programs of Alaska which tend to have Statewide significance and are not so easily cataloged by region. Besides further comments on wildlife, this section discusses Wilderness Areas, National Trails, Wild and Scenic Rivers, and historic and natural sites and landmarks. In addition, it reviews the recreation resources of adjacent Canadian areas.

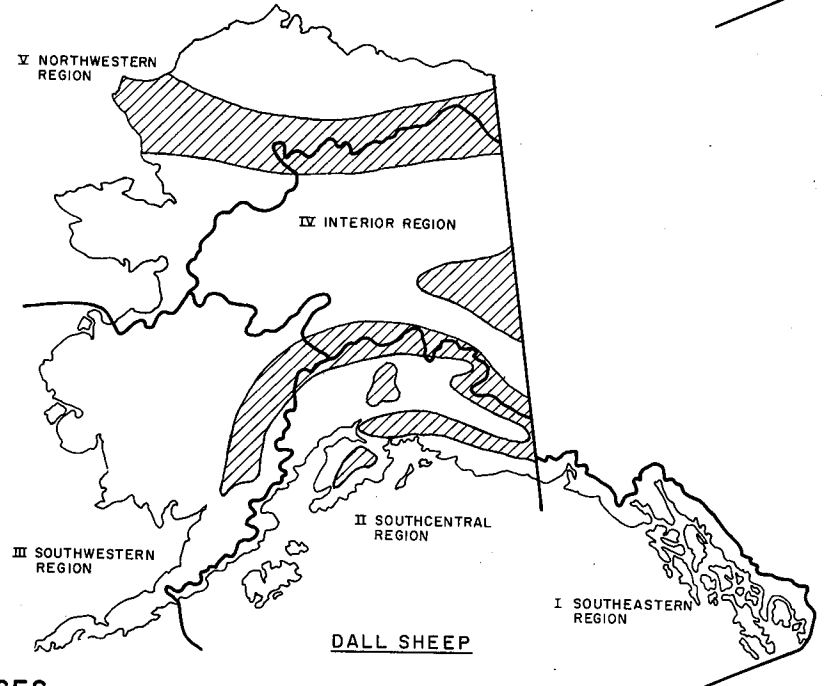
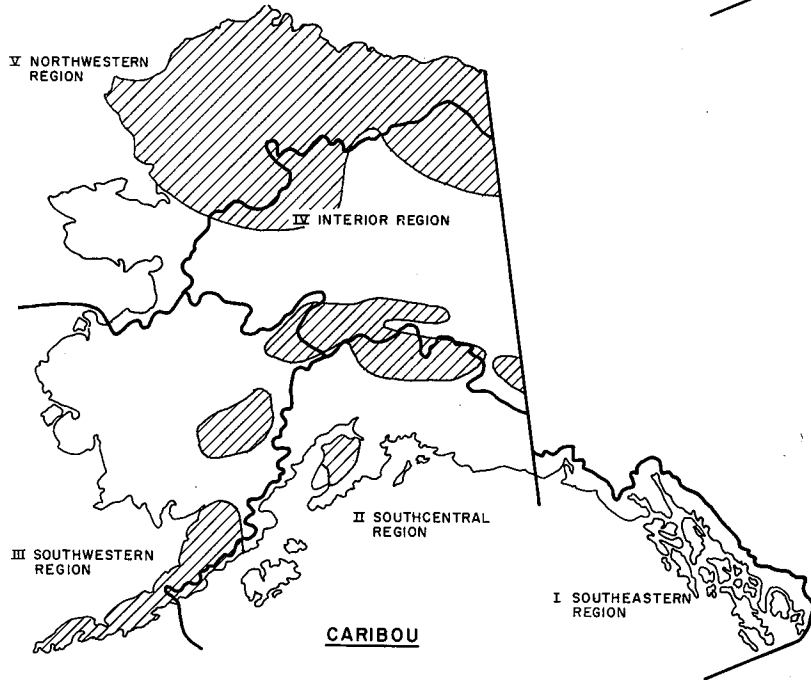
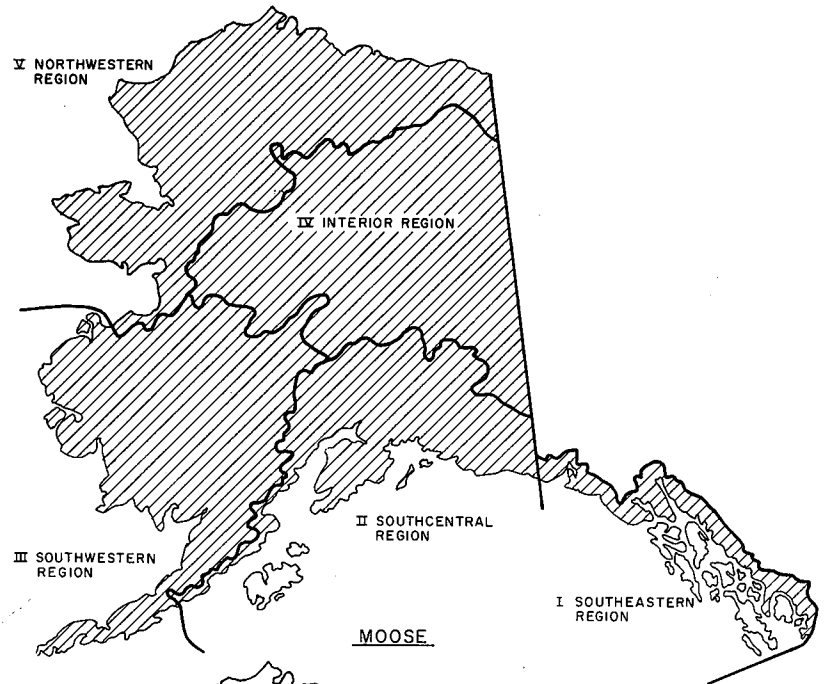
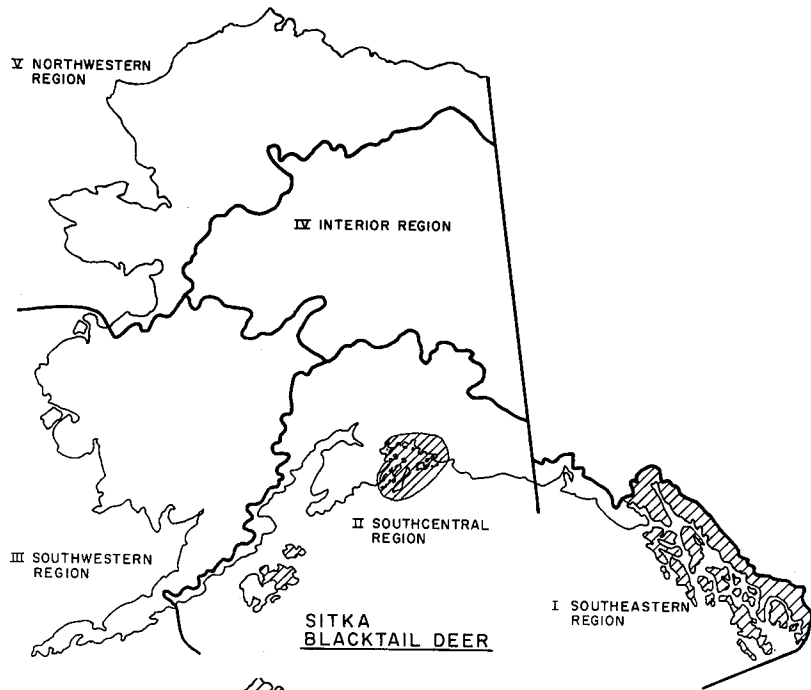
WILDLIFE IN ABUNDANCE

Alaska's tremendous size, her topographical variety and her variations in climatic conditions make an extremely wide range of wildlife available for sportsmen, sightseers and nature lovers. The paragraphs below outline the variety and abundance of game and fish.

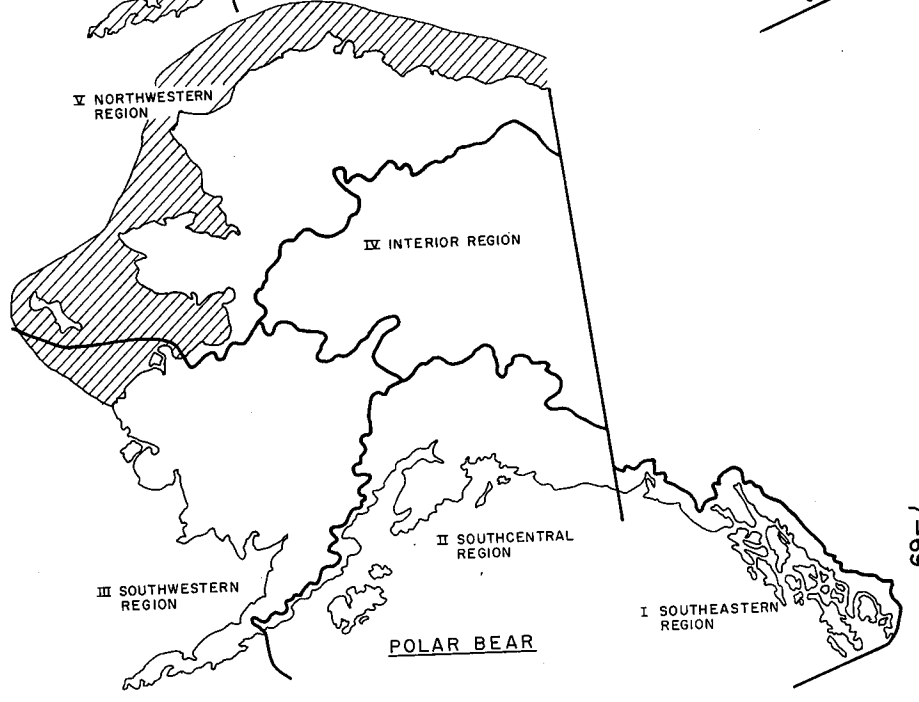
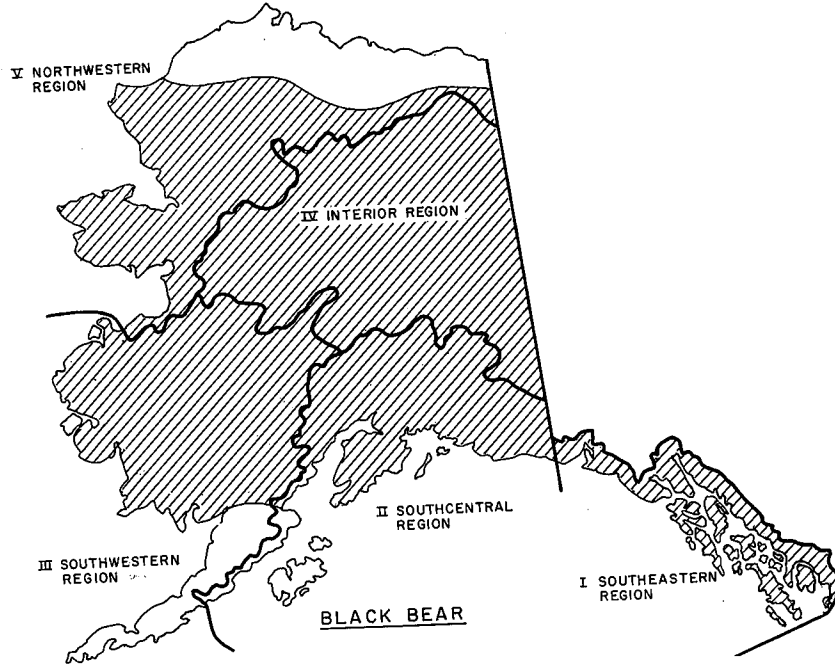
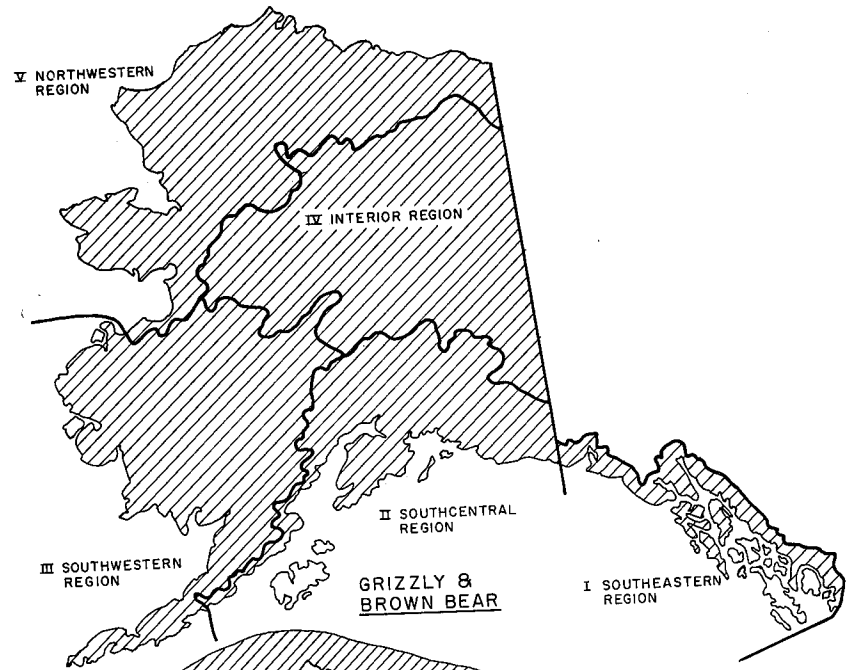
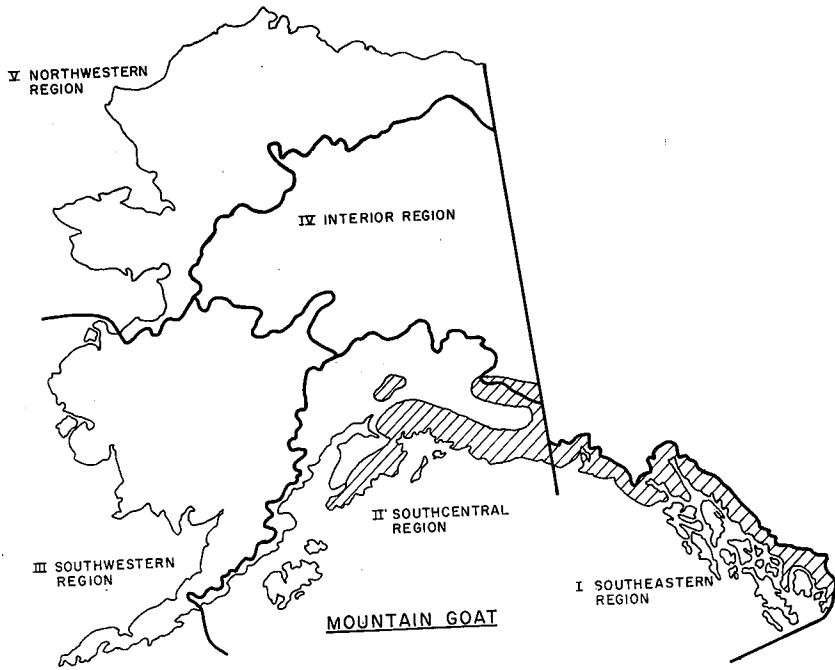
Game

Exhibit IV-18 indicates, by region, the location of major species of game found throughout the State.

- Black-tailed deer are found throughout Southeastern Alaska and in parts of South Central Alaska (Prince William Sound and Kodiak Island).
- Moose, the largest members of the deer family, are distributed throughout the State but are particularly common on the Kenai National Moose Range.
- Caribou are distributed throughout the State in large numbers.
- Dall sheep, the only all-white wild sheep, are found in all major mountainous areas of Alaska except the Panhandle; the Dall ram is a prized trophy for sportsmen around the world.
- Mountain goats are found in the coastal mountains between the Kenai Peninsula and the southern end of the Panhandle.
- Grizzly bears and brown bears are distributed throughout the State, with the brown bear inhabiting the coastal areas and the grizzly found inland.



GAME RESOURCES



GAME RESOURCES

- Black bears are spread over the State except in the far northern and southwestern portions, and are so abundant that, in much of the State, up to three bears may be legally taken.
- Polar bears, one of Alaska's prime symbols, are found on the ice packs of the Arctic Ocean and the Bering Sea.
- Elk are not spread widely over the State, but are found on Raspberry and Afognak Islands.

In addition to the game covered in the previous exhibit, Alaska also has the following land and marine animals which are frequently hunted and trapped:

Bison
 Wolf and wolverine
 Mink, marten fox and weasel
 Lynx and land otter
 Blue and white fox
 Muskrat
 Beaver
 Squirrel and marmot
 Coyote
 Sea otter
 Hare and rabbit
 Walrus and sea lion
 Seal and porpoise
 Beluga and other species of whale.

Although not native to Alaska, reindeer can be found in the Northwestern Region, where they are managed in 17 semidomesticated herds, much like cattle. In addition, managed herds of musk oxen, a rare North American mammal, are located on Nunivak Island in the Bering Sea.

Altogether, the big game population of Alaska (bears, deer, sheep, goats, moose, elk, caribou, bison, musk oxen, wolves, wolverines and walrus) is believed to exceed 1,000,000 head. Due to the difficulties of access, however, only about 60,000 of these animals are harvested out of the estimated 100,000 produced annually.

Upland Game Birds And Waterfowl

Alaska also has an abundance of upland game birds, with 177 species of birds resident in Alaska year-round, and 414 migratory species and subspecies using Alaska as a nesting place.

Alaska offers three species of ptarmigan to the bird hunter, as well as three species of grouse which can be found near most communities. In addition, chickadees, crows, jays, ravens, winter wrens, woodpeckers and some sparrows are permanent in Alaska.

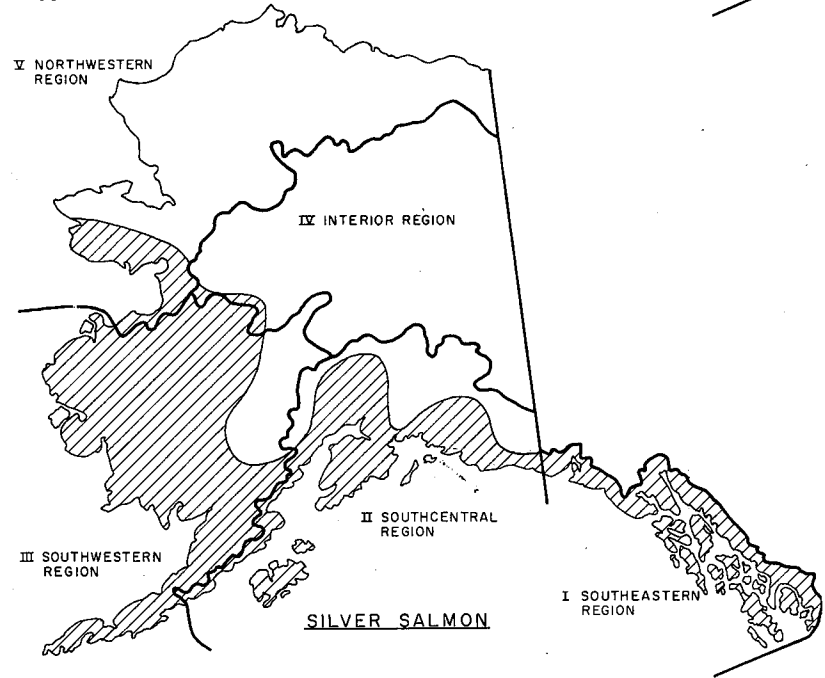
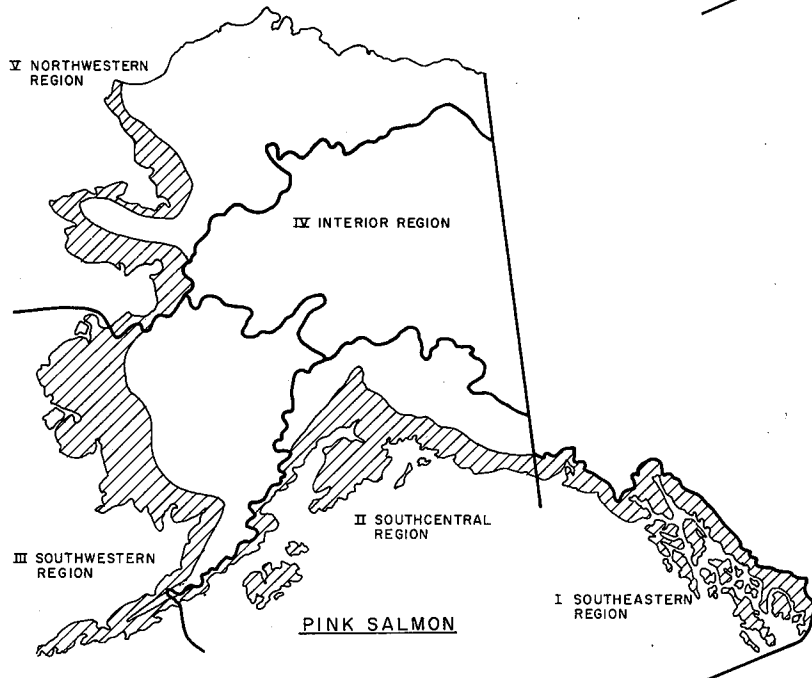
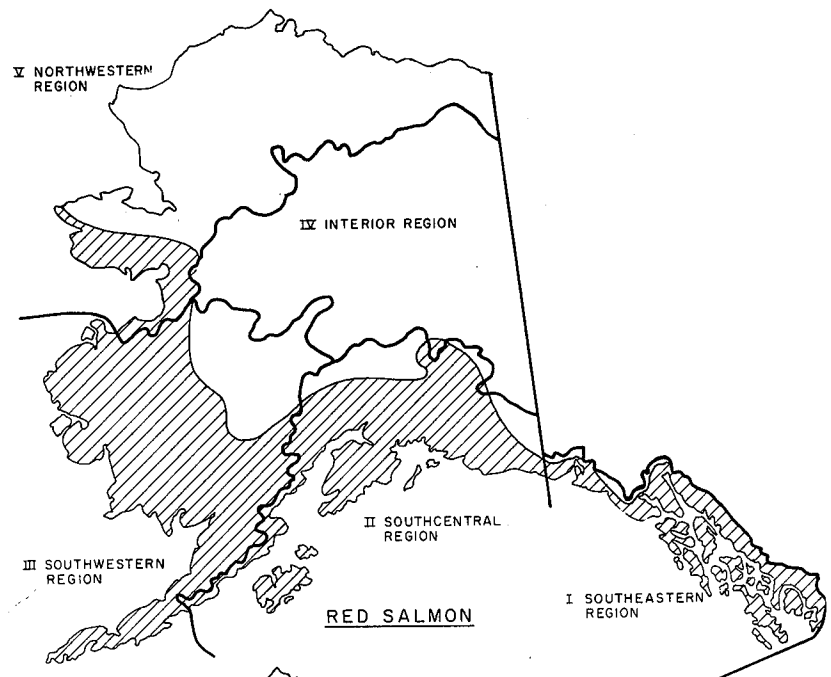
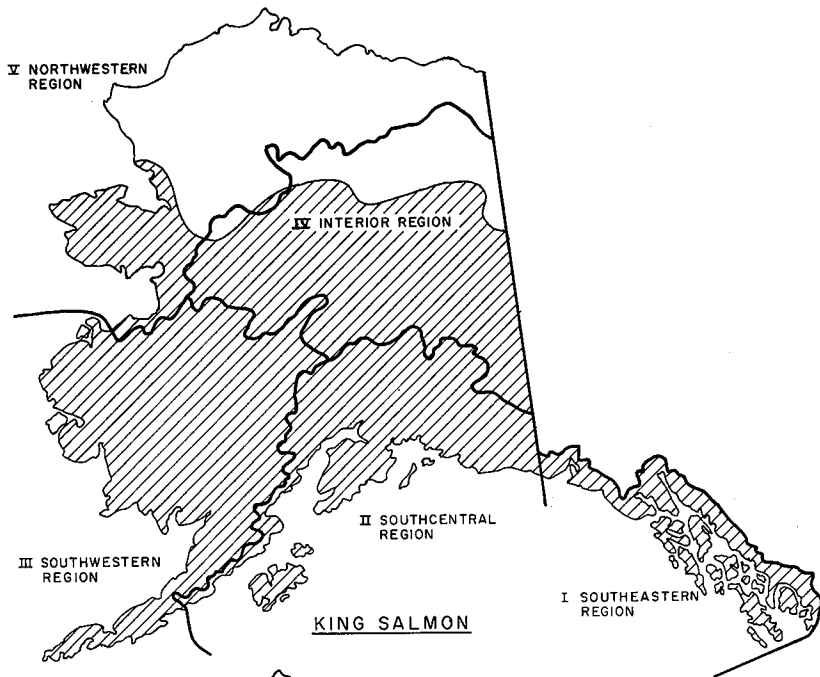
Migratory birds fly to Alaska over the four major North American flyways as well as the Pacific Ocean route, the Asiatic route, and the Arctic route. Fifty species of waterfowl have been identified in Alaska, of which 40 nest there, including three species of swans, nine of geese, and 29 of duck.

Fish And Shellfish

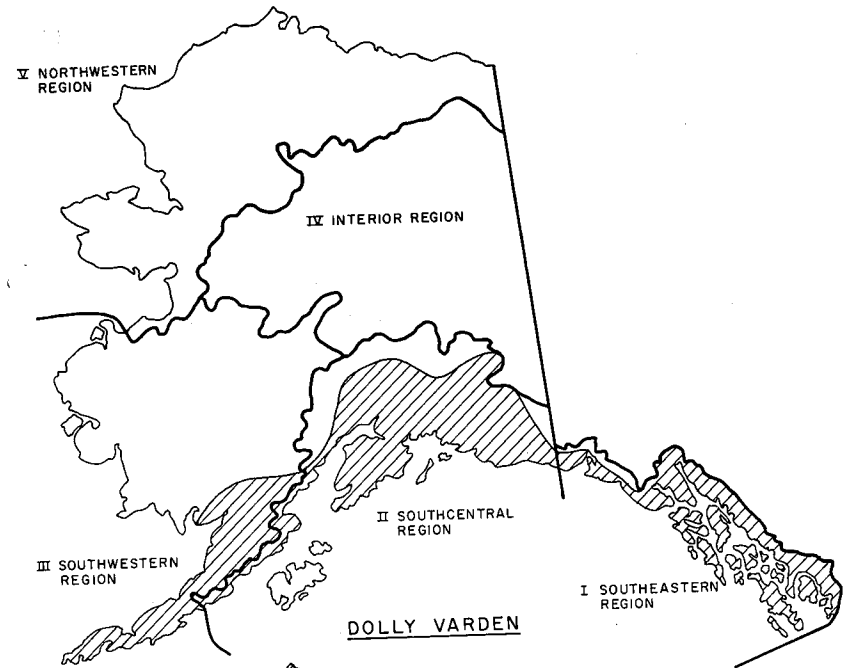
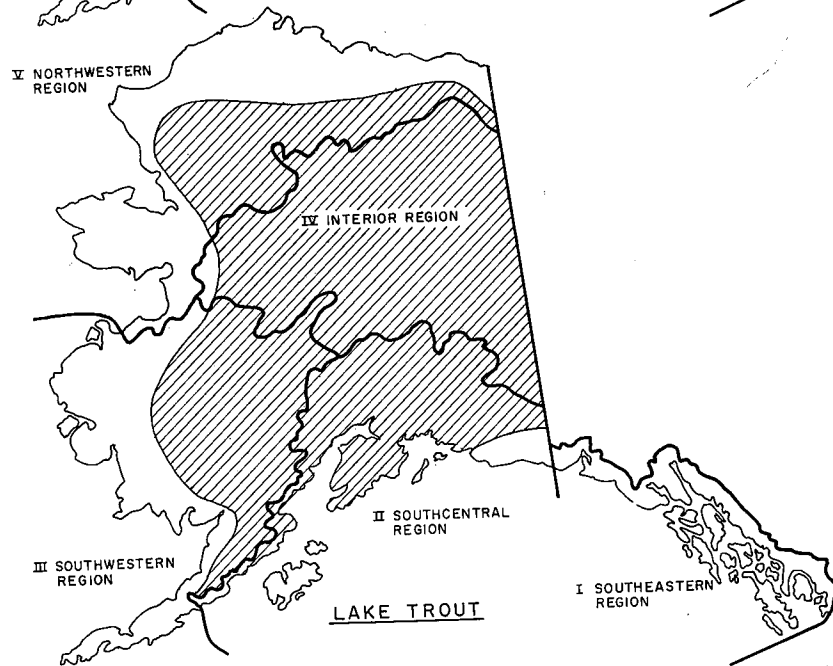
The magnitude of Alaska's fishery potential is illustrated by the fact that Alaska contains more than 15 per cent of the total natural freshwater fishery potential of the United States, while saltwater commercial fishing is currently the State's largest industry.

Alaskan anglers regularly catch more than 20 kinds of fish and shellfish, with another half dozen or so species providing sporadic but locally important food and sport. Exhibit IV-19, together with the text below, identifies the areas of the State where some of the major varieties of fish can be found.

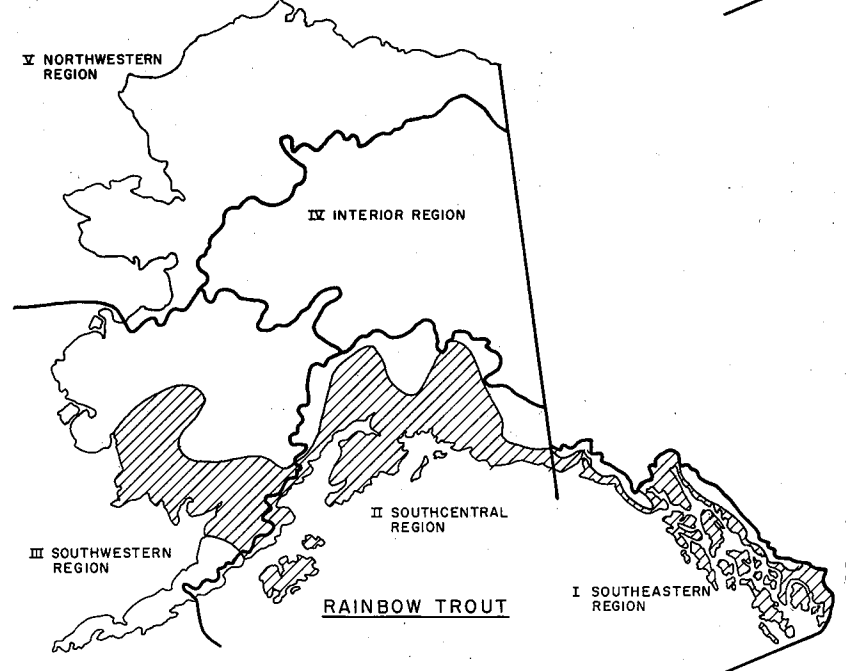
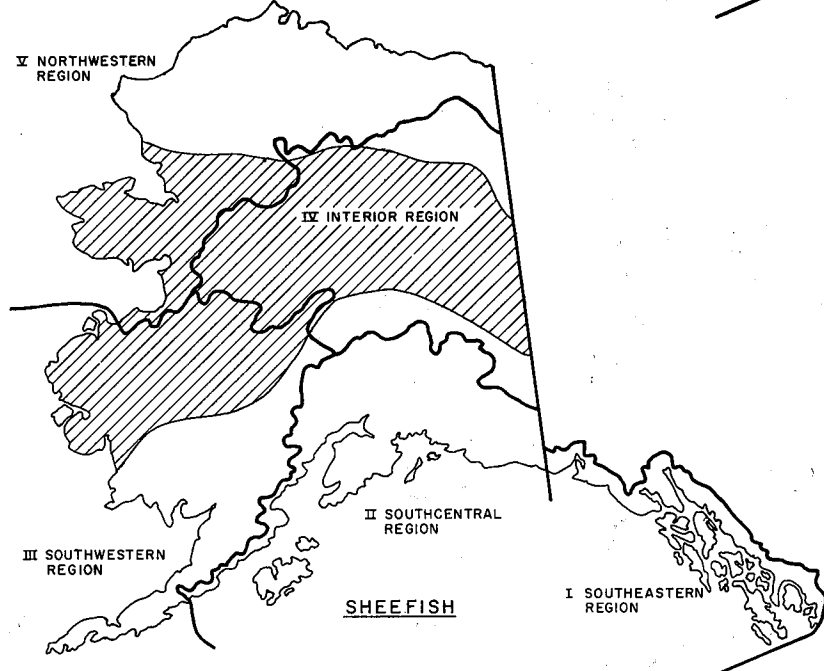
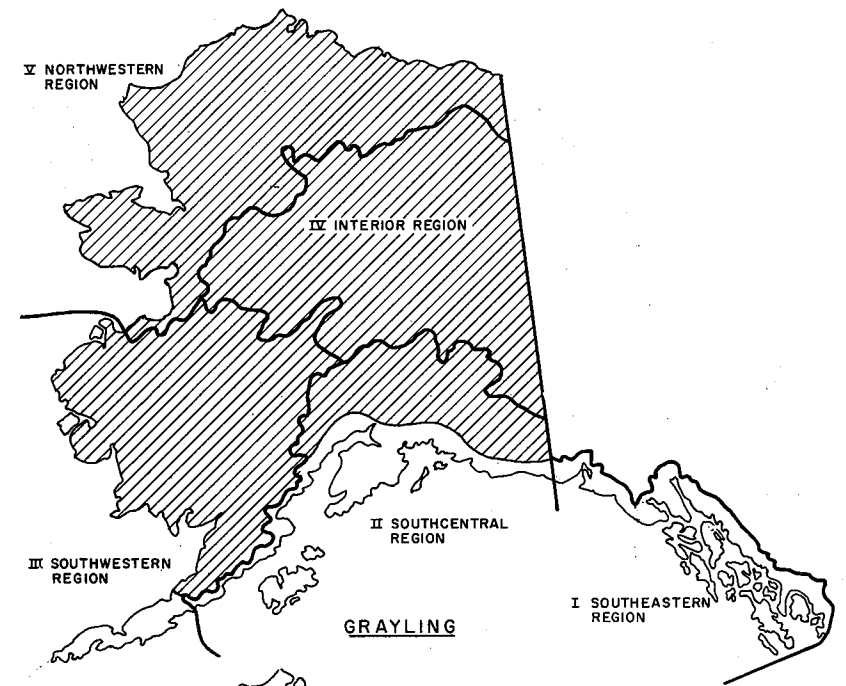
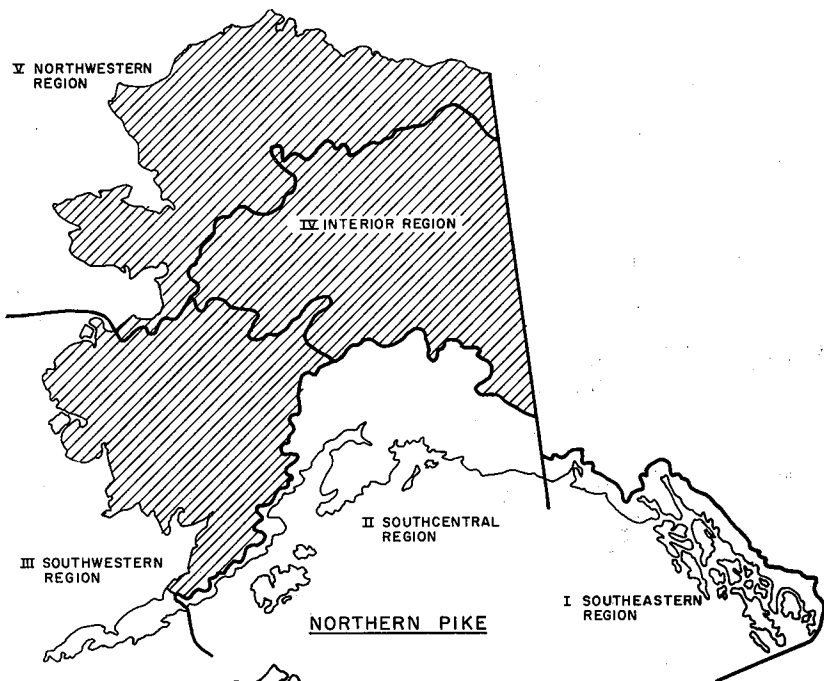
- King (or Chinook) salmon, highly prized by saltwater fishermen, are found throughout most of the State but are most abundant in the Pacific coastal waters; catches of 35 to 50 pounds are common.
- Red salmon are a major sport fish, frequently caught on the Kenai Peninsula and in the Bristol Bay area.
- Pink salmon are usually caught in Prince William Sound and upper Cook Inlet.
- Silver (Coho) salmon, found in abundance from Southeastern Alaska to Bristol Bay, are popular with saltwater fishermen.
- Cutthroat trout are limited to areas from Southeastern Alaska to Prince William Sound.
- Dolly Varden char are found throughout the coastal regions from Southeastern Alaska to Bristol Bay.
- Lake trout, the largest of the chars, are found in the inland lakes of the Interior and Northwestern Regions and near the Bristol Bay and South Central coasts.



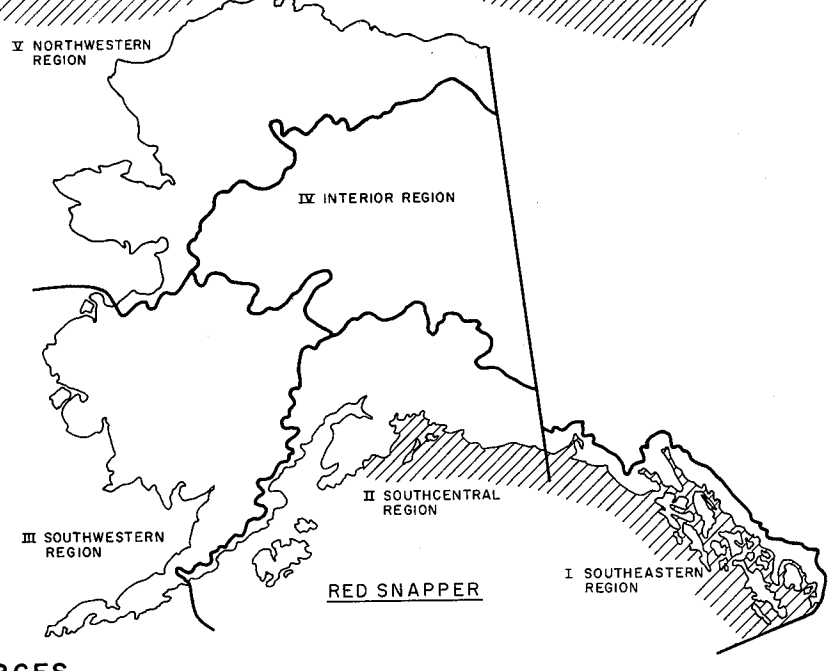
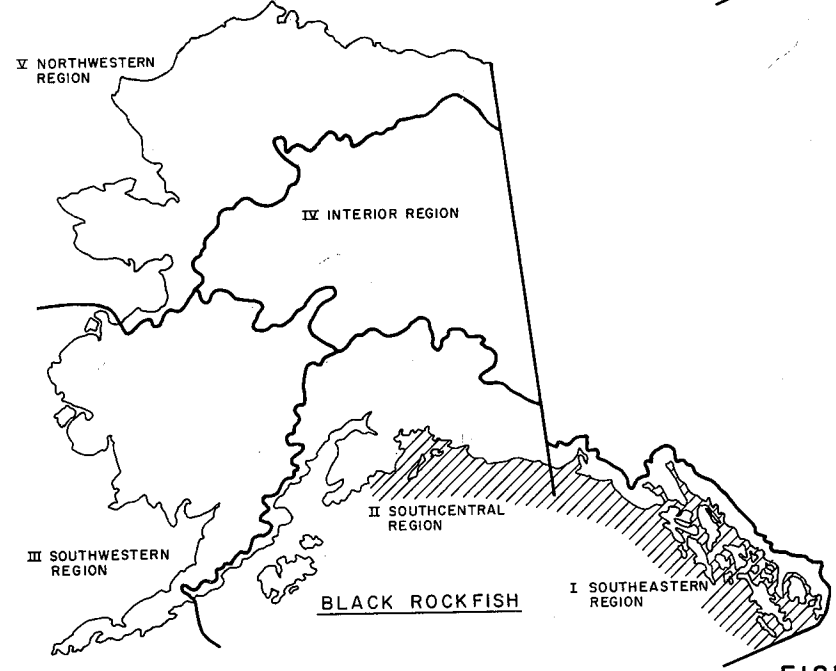
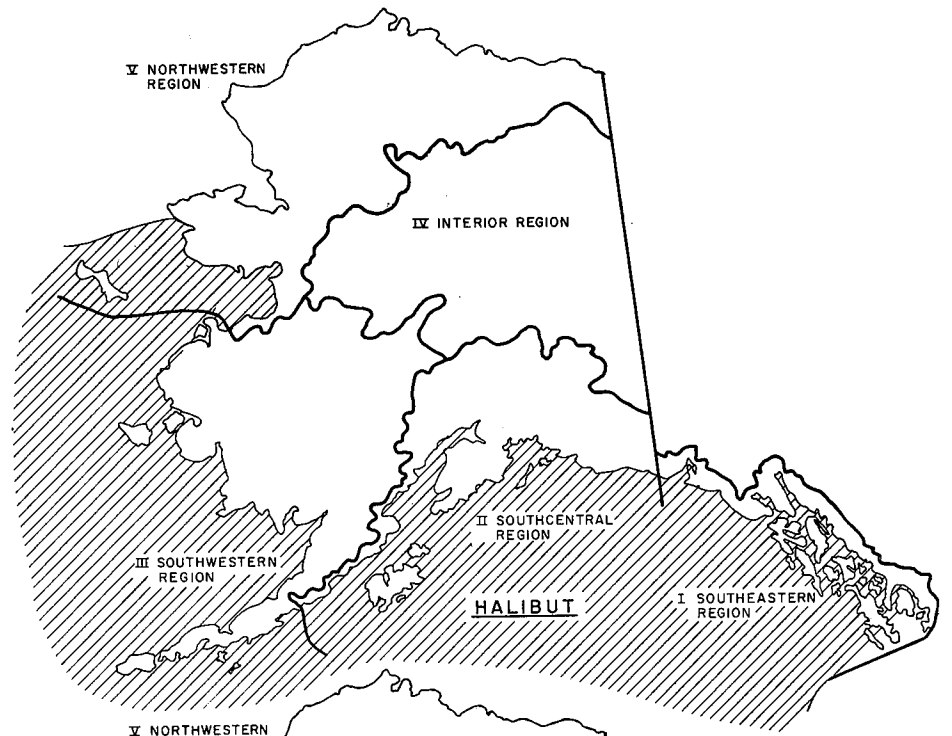
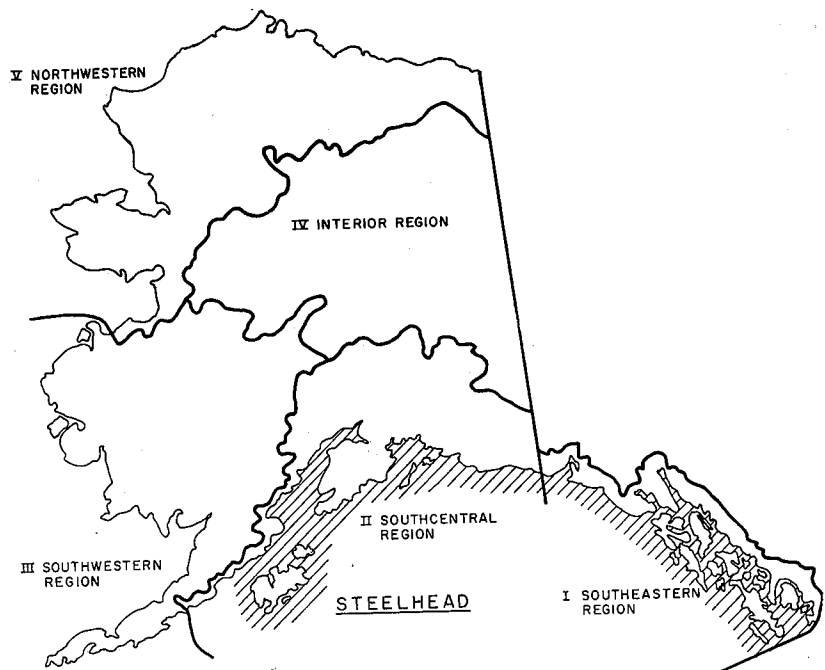
FISH RESOURCES



FISH RESOURCES



FISH RESOURCES



FISH RESOURCES

- Arctic char are found in nearly all streams near the coast from Bristol Bay north and around to the Yukon Territory; they range up to 25 or 30 pounds.
- Northern pike are found in lakes and streams of Interior, Southwestern and Northwestern Alaska; they furnish considerable sport for the trophy fishing camps in the Bristol Bay area.
- Grayling are found in great numbers in the freshwater streams of Northwestern and Interior Alaska.
- Sheefish (Inconnu) are native to the Kuskokwim, Yukon and Kobuk Rivers, Selawik Lake, and other large streams in the Arctic. These large fish range in size from 10 to 25 pounds and are very powerful. They are little known, but are worthy antagonists and very desirable sport fish.
- Rainbow trout are native to the Southeastern, South Central and Southwestern coastal areas, from Dixon Entrance to the tributaries of the Kuskokwim. The drainages into Bristol Bay provide some of the best rainbow fishing in North America.
- Steelhead are found in the coastal streams of Southeastern and South Central Alaska.
- Halibut ranging up to 100 pounds are readily available to the angler who has a boat of sufficient size for use on the open ocean. Like salmon, halibut are the focus of a number of annual fishing derbies in Alaska.
- Black rockfish average five pounds, are good eating, and are found offshore from Southeastern Alaska to Prince William Sound.
- Red snapper, a high-quality eating fish, usually heavier than 25 pounds and up to three feet long, are also found offshore from Southeastern Alaska to Prince William Sound.

In addition to freshwater and saltwater fish, numerous species of shellfish (such as shrimp and the famed Alaska king and Dungeness crab), flatfish, rockfish, razor and butter clams are available and harvested. Crab is a major cash crop for the fishing industry.

To facilitate the State's development of sport fish, active programs are carried on by the Sport Fish Division of Alaska's Department of Fish and Game to rear fish, and to rehabilitate and stock major lakes near the more heavily populated areas of Alaska.

WILDERNESS, NATIONAL
TRAILS, AND WILD
AND SCENIC RIVERS

This section focuses upon the relationship to Alaska of three significant Federal programs which have been enacted to protect natural and scenic areas and to provide access by foot along trails of national significance.

Wilderness In Alaska

In 1964, Congress passed the Wilderness Act (Public Law 88-577), in an effort to provide permanent protection to the vestiges of American wilderness. The Act calls for Congressional designation of Federally owned areas that meet the wilderness criteria.

The original legislation did not establish any Wilderness Area in Alaska, but studies are currently being conducted by the Forest Service, the National Park Service and the Fish and Wildlife Service concerning lands managed by these agencies. In addition, a private group, the Alaska Wilderness Council, is reviewing lands in Alaska for possible consideration as Wilderness Areas; and the Bureau of Land Management (BLM), which regards its "primitive" classification as an equivalent to Wilderness Area, considers this as one alternative use of land in conjunction with its unit resource analysis studies. With the abundance of such lands in Alaska, it is perhaps natural that there has been little pressure until recently to create Federally designated Wilderness Areas in the State. Recently, however, conservationist groups both within and outside Alaska have begun to urge completion of the Wilderness Area studies and nomination of selected areas for formal designation.

Recent studies indicate that use of the wilderness will increase dramatically with rising education and income. Experts feel that the wilderness demands on Alaska by residents of the other 49 states will be tremendous in the coming years, and that actions will be needed soon if the prime areas are to be preserved.

Among the areas which have been suggested for study are the following (present land management indicated in parentheses):

- Tracy Arm - Ford's Terror Scenic Area (Forest Service)
- Walker Cove - Rudyerd Bay Scenic Area (Forest Service)
- Eastern portion of Admiralty Island (Forest Service)
- Western Chicagof - Yakobi Islands (Forest Service)

- Southern portion of Baranof Island (Forest Service)
- Yakutat Fiords (Forest Service)
- West Prince William Sound (Forest Service)
- Delta Mountains in the Alaska Range (Bureau of Land Management)
- Kandik - Nation Rivers area (Bureau of Land Management)
- Mulchatna - Chilikadrotna River complex (Bureau of Land Management)
- Hoholitna River - Whitefish Lake (Bureau of Land Management)
- Togiak River drainage (Bureau of Land Management)
- White Mountains (Bureau of Land Management)
- Hays Mountains in the Alaska Range (Bureau of Land Management)
- Kigluik Mountains (Bureau of Land Management)
- Sawtooth - Wolverine Mountains (Bureau of Land Management)
- Glacier Mountain (Bureau of Land Management)
- Nutzotin Mountains in the Alaska Range (Bureau of Land Management)
- Charley River Area (Bureau of Land Management)
- Alatna River - Walker Lake area in the Brooks Range (Bureau of Land Management)
- Gates of the Arctic (Bureau of Land Management)
- Wrangell Mountains (Bureau of Land Management)
- Malaspina Glacier (Bureau of Land Management)
- Gulkana River (Bureau of Land Management)
- Mt. Redoubt (Bureau of Land Management).

In addition, the U. S. Fish and Wildlife Service has conducted hearings regarding Wilderness Area designation for several island wildlife refuges.

National Trails

A program for National Recreation and Scenic Trails was begun in 1968 with Congressional passage of the National Trails System Act (Public Law 90-543). This legislation calls for National Recreation Trails, selected by the Secretary of Interior or the Secretary of Agriculture, to provide recreation opportunities in or near urban areas, as well as National Scenic Trails designated by Congress for "outdoor recreation . . . conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities" of areas found adjacent to the trails.

No National Scenic Trails in Alaska were established by the Act, and no National Recreation Trails have been designated in the State. The legislation did identify, however, a number of trail systems which are to be studied for potential designation as Scenic Trails, including the Gold Rush Trails:

- Valdez - Fort Egbert
- Goat Trail (McCarthy to the Klondike)
- Fort Gibbon - Fort Egbert (Tanana to Eagle)
- Fairbanks - Circle
- Fairbanks - Bettles
- Fairbanks - Nome Mail
- Fort Gibbon - Fort St. Michael
- Iditarod Trail
- Stampede - Wood River
- Chilkoot Trail (Dyea to Lake Bennett)
- White Pass (Skagway to Lake Bennett)
- Dalton Trail (Haines to Dawson City).

This study, not yet begun, will bring together Federal, State, local and private representatives to examine the feasibility and desirability of designating the Gold Rush Trails as National Scenic Trails. If the decision is favorable, a proposal will be prepared for submission to the President and Congress.

Alaska is fortunate to have numerous additional trails and hiking opportunities which might be worthy of consideration. Among these are some of the 30 hikes, located not far from the Anchorage area (such as the Resurrection Pass Trail), which have been identified by the Mountaineering Club of Alaska and the Mountaineers in their booklet, "30 Hikes In Alaska."

One interesting section of the original Scenic Trails legislation encourages states to give active consideration to their own needs for trails and trail systems, and to include this consideration as a part of their statewide comprehensive outdoor recreation plans.

Wild And Scenic Rivers

On the same day that the National Trails System was established, Congress also enacted the Wild and Scenic Rivers Act (Public Law 90-542), establishing the policy that "certain selected rivers . . . which possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or similar values shall be preserved in their free-flowing condition and . . . they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."

The System of Wild and Scenic Rivers is to be made up of rivers selected by Congress for inclusion plus those designated and administered by the individual states. No rivers in Alaska were designated or identified for future study, but the legislation did encourage the Secretaries of the Interior and of Agriculture to study and submit proposals for future additions, and further suggested that the states themselves establish and administer Wild and Scenic Rivers where they believe such actions to be desirable or necessary. Rivers in Alaska that are currently listed for future study by the Bureau of Land Management include the following:

Alapah	Koyukuk
Alatna	Koyukuk (North Fork)
Alsek	Kurupa
Ambler	Kuskokwim
Aniuk	Kuzitrin
Beaver Creek	Kvichak
Bettles	Melozitna
Birch Creek	Mulchatna
Bremner	Nabesna
Chandalar	Naknek
Chandalar (East Fork)	Nation
Charley	Newhalen
Chitna	Noatak
Coleen	Nushagak
Colville	O'Brien Creek
Copper	Porcupine
Copper (Iliamna)	Robertson
Cutler	Salcha
Delta	Seventymile
Etivluk	Sheenjok
Fish	Stikine
Fortymile	Susitna
Goodpaster	Taku
Gulkana	Tanana
Hoholitna	Tazimina
Holitna	Togiak
John	Toklat
Kakhonak	Tyonek
Kandik	White
Kanektok	Wind (East Fork)
Kateel	Wood
Knik	Yentna
Kobuk	Yukon

**HISTORIC AND
NATURAL SITES
AND LANDMARKS**

Alaska has a rich natural environment and history which a number of Federal and State programs seek to protect and encourage. The State is in the process of establishing a system of historical monuments, while the National Park Service administers a number of programs which preserve, or encourage the preservation of, historic and natural resources.

Alaska's First State Historical Monument

The State of Alaska recently began its program for State historical monuments by naming the Wickersham House in Fairbanks as the State's first Historical Monument. This house, built in 1905 and now located at the Alaskaland site, was the home of one of Alaska's major pioneers. Judge James Wickersham was the Territory's initial delegate to the Congress, led the earliest attempt to scale Mt. McKinley, and introduced the first bill for Alaskan statehood in 1916.

National Parks, Monuments And Recreation Areas

As indicated earlier in this chapter, the National Park Service administers four major National Parks and Monuments in Alaska. Nationwide, the National Park Service also administers a program for National Recreation Areas - lands of above-average quality, located in proximity to major urban centers, which provide a variety of recreational opportunities not otherwise available. Alaska at this time has no National Recreation Areas.

National Historic And Natural Landmarks

In order to establish an inventory of nationally significant historical and natural properties of America, and to encourage their continued preservation, a Registry of National Landmarks was begun under the authority of the Historic Sites Act of 1935. The program is voluntary, and registration does not change ownership or responsibility for the property.

Five National Historic Landmarks have been dedicated and registered in Alaska, as follows:

- American Flag Raising Site, on Castle Hill in Sitka, is the place where, on October 18, 1867, Alaska was formally transferred to the United States with the lowering of the Russian Double Eagle and the raising of the Stars and Stripes.
- Old Sitka Site, six miles north of Sitka on Starrigavan Bay, is the location of the first Russian Settlement in Southeastern Alaska, in 1799.
- Russian Mission Orphanage, in Sitka, built in 1842, served as a Russian boarding school and the home of the first Bishop of Alaska.
- St. Michael's Cathedral, in Sitka (destroyed by fire in 1966), was built in 1844 by the Russian Orthodox Church. The cathedral, a fine example of Russian architecture, is in the process of being rebuilt.
- Skagway and White Pass, at the head of Taiya Inlet on the Lynn Canal, represent Alaska's pioneer gold rush area, and Skagway was the starting point of the White Pass Trail to the goldfields.

Alaska has 11 additional historic landmarks declared eligible for registration by the National Park Service, as follows:

- Anvil Creek Gold Discovery Site on Anvil Creek, 4-1/2 miles north of Nome on the Seward Peninsula, is the site of the 1898 placer gold strike that started Alaska's largest gold rush and caused Nome to grow from a small community to a tent city of 20,000 within one year.
- Birnirk, five miles northeast of Barrow and south of Point Barrow on stranded beach ridges, has provided archeologists with material enabling them to describe the cultural development of the Eskimos from 600 A. D. to the present.
- Chaluka, adjacent to the village of Nikolski, on the northern coast of Umnak Island in the Aleutians, is also an important archeological site for the study of cultural development.
- Erskine House, in Kodiak, built in 1792-1793, is Alaska's oldest structure and was constructed under the direction of Alexander Baranof.
- Fur Seal Rookeries, on St. Paul Island in the Pribilofs, are controlled breeding grounds for Alaska's fur seals, the resource which first drew Russian, French, Spanish, British and American fur hunters to Alaska.
- Gambell Sites, adjacent to the town of Gambell on St. Lawrence Island, are only 46 short miles from Russian Siberia, and are of considerable archeological importance in tracing Eskimo prehistory.
- Ipiutak, adjacent to Point Hope, is the "ageless city of the Arctic" where Eskimos still live in homes of driftwood, whalebone and blocks of sod; and is also an important archeological site.
- Iyatayet, on Norton Sound, between 6,000 and 8,000 years old, provides the earliest evidence of man yet recorded in Alaska.
- Palugvik, at East Point on Hawkins Island in Prince William Sound, helped archeologists determine that Eskimo-speaking inhabitants of this area were part of a long-established culture rather than nomadic newcomers.
- Wales Complex, adjacent to Wales on Seward Peninsula, has provided archeological materials dating from 600 B.C. to the present.

- Yukon Island (Main Site), on the south side of Yukon Island in Kachemak Bay, is the oldest and most continuously occupied of the Cook Inlet aboriginal sites, dating back more than 2,700 years.

One site in Alaska has been dedicated as a National Natural Landmark:

- Lake George, near Palmer, is a world-renowned self-dumping lake. Each winter, as Knik Glacier advances against peaks of the Chugach Mountains, it seals off the outlet to this lake. The following summer, melting snow raises the water level, and the overfilled lake pours over the glacier dam, carving immense blocks of ice from the face of the glacier.

Alaska also has at this time a number of areas that have been declared eligible for registration as Natural Landmarks:

- Aniakchak Crater, 24 miles southwest of Port Heiden, is one of the largest known volcanic craters in the world (approximately 20,000 acres).
- Arrigetch Peaks, in the central Brooks Range approximately 250 miles northwest of Fairbanks, provide important examples of geological processes and illustrations of tundra and boreal forest ecology.
- Bogoslof Island, 25 miles north of Umnak Island in the Aleutians, is a national wildlife refuge and the site of numerous volcanic eruptions over the past 130 years.
- Brown Bear Refuge, 200 miles southwest of Anchorage at McNeil River, has been set aside by the State to provide permanent protection for the brown bear in a natural habitat.
- Clarence Rhode National Wildlife Refuge is the major nesting area for a great variety of birds, and thus is a mecca for bird study.
- Middleton Island, in the Gulf of Alaska, is a prime example of tectonic uplift resulting from earthquakes (it was uplifted ten feet by the 1964 earthquake).
- Mount Veniaminof, 20 miles southeast of Port Moller in the Bering Sea, is the only known glacier on the continent with an active volcano vent in its center.

- Shishaldin Volcano, 50 miles west of Cold Bay in the Aleutians, has a 63,000-acre crater and is the highest of the 11 known volcanoes on Unimak Island.
- Unga Island, 70 miles east of Cold Bay just off the Alaska Peninsula, offers petrified logs and stumps which are important evidence of the passage of species between Asia and America.
- Walker Lake, on the south slope of the Brooks Range, provides an example of the geological and biological relationships of a mountain lake at the northern limit of forest growth.
- Walrus Islands, in Bristol Bay, includes five islands owned by the State and administered as a walrus sanctuary. Round Island of this group was declared eligible for natural landmark status.
- Worthington Glacier, one of the most accessible glaciers in Alaska located near Valdez beside the Richardson Highway, is a good example of the many glaciers of the Coastal Mountain Range.

Two additional sites have recently been recommended for inclusion in the National Register of Natural Landmarks - the Malaspina Glacier, and the Simeonof Island National Wildlife Refuge.

Historic Sites

On October 15, 1966, Congress passed the National Historic Preservation Act (Public Law 89-665), an outgrowth of the National Historic Sites Act of 1935. The National Historic Preservation Act was intended to assist states and local governments in expanding and accelerating their historic preservation programs and activities. Among other things, it calls for:

- A national register of districts, sites, buildings, structures and objects significant in America
- Assistance to states in preparing comprehensive statewide historic surveys and plans
- A program of matching grants to states to assist in acquisition, restoration and development.

Unfortunately only a very small amount of funds has been allocated for this program, and its future status remains uncertain.

CANADIAN RECREATION RESOURCES

This section briefly touches upon the recreation resources nearby in Canada which have significance to Alaska, and the related programs of British Columbia and the Yukon Territory. In addition to the interchange of residents between Canada and Alaska for recreation purposes (such as the Arctic Winter Games, and ski and hockey competition), areas and facilities of Canada have major importance as they affect the visitor bound to Alaska or home after a vacation.

Routes To Alaska

For those who drive to Alaska, the highways, recreation areas and facilities of British Columbia and the Yukon Territory serve as a first introduction to much of the terrain and climate they will encounter when they arrive in Alaska. The Alaska Highway, with motel and campsite accommodations for more than 4,500 people, passes through long scenic stretches of primitive area next to mountains, fishing streams and former trading posts. The 1,200 miles of Canadian roadway are graveled but well maintained.

Visitors may also come to Alaska through Canada by driving up Vancouver Island to Kelsey Bay and making ferry connections on to Alaska through Prince Rupert or, instead, may drive to Prince Rupert from Prince George over Highway 16, which also provides a large number of camping areas.

Recreation Programs Of British Columbia

The government of British Columbia has organized for recreation in much the same fashion as Alaska. The Canadian Government assumes responsibility for resources of national significance; the Province's Department of Recreation and Conservation maintains a series of parks, and cooperates with other departments such as the Department of Lands and the Department of Fish and Game in developing recreation areas and facilities on the properties which they administer. In urban areas, local governments (as in Alaska) have the major impact on developing recreation areas and facilities for urban residents.

The Parks Branch of the Department of Recreation and Conservation has primary responsibility for the management of specialized parklands, which are available for a wide range of outdoor recreational activities.

In order to limit and guide the use of the parks for economic development or exploitation, all of Canada's park areas are assigned to one of three classes - A, B, or C. Class B parks are preserved for public pleasure and recreation, and other types of use are permitted in these parks only if they will not in any way depreciate the recreational value of the area. Parks in Classes A and C, on the other hand, are reserved strictly for recreational use, and no commercial or industrial exploitation is permitted except as necessary to develop or protect the land for public enjoyment.

The recreational uses of British Columbia's parks are many and varied, although primary attention is directed toward activities associated with man's cultural heritage and place in the universe. Specifically, the Branch of Parks provides facilities for:

Boating and canoeing	Outdoor sport and games
Camping	Picnicking
Collecting and photography	Sightseeing and viewing scenery
Fishing	Skiing and winter sports
Hunting	Strolling, hiking and
Observation and study	mountaineering
	Swimming and water sports.

The parks of British Columbia are further divided into seven classes which are defined to ensure compatible usage in individual parks:

- Wilderness parks, containing representative or outstanding ecological units, where the purpose is to preserve undisturbed natural environments
- Cultural parks, containing geological, biological, historical, archeological or other features representative of the public heritage, where the purpose is to perpetuate and display these features for their inspirational or educational effects
- Multi-use parks, offering space, cover and topography in contrast with modern urban conditions, where the purpose is to provide opportunities for any two or more appropriate recreational activities
- Specialized recreation parks, containing a dominant feature facilitating intensive participation in a single activity, where the purpose is to provide maximum opportunity for enjoyment of that particular recreational activity

- Wayside parks, comprising more or less attractive nonurban lands adjacent to highways, where the purpose is to provide resting places, campgrounds and similar amenities for the accommodation and convenience of motorists
- Marine parks, containing sheltered areas on waterways, where the purpose is to provide anchorages and moorages, campsites and rest areas for boatmen
- Community parks, where the purpose is to make lands available to unorganized communities to accommodate local recreation needs which cannot be met on other lands.

Recreation Programs Of The Yukon Territory

Recreation areas and programs in the Yukon Territory are provided by both the federal and territorial levels of government. The federal agencies, headed by the Commissioner of the Department of Indian Affairs and Northern Development, are responsible for land management in the Yukon Territory. These agencies include:

- Yukon Forest Service
- Indian Affairs Branch
- Canadian Wildlife Service
- Department of Fisheries
- Yukon Historic Sites Branch
- Water Resources Service.

The Yukon Forest Service currently provides approximately 40 campgrounds, spaced at 50-mile intervals along the Alaskan Highway (with greater density near population centers such as Whitehorse). These campgrounds, built and in some cases maintained under a federal/territorial 50-50 matching program, are generally considered to be of excellent quality.

The Canadian Wildlife Service and the Department of Fisheries, working with the counterpart territorial agency, are responsible for fish and game management, including three game sanctuaries and a game preserve. Hunting preserves in the Yukon Territory are not yet considered to be of first quality, but many fine trophies are available to resident and visiting sportsmen.

There are no national parks in the Yukon Territory at present, but one has been proposed at Kluane, near the Alaska Highway. On the other hand, there is a historic sites program, with a full-time Territorial Superintendent who is working toward restoration of a Klondike Sternwheeler and 14 buildings in colorful Dawson.

The Territorial Department of Education, with strong assistance from local community groups, is shaping many of its recreation programs around the natural environment of the area, with major programs for hockey, skating, skiing and similar sports. The recreation programs in the education system concentrate on lower-cost outdoor recreation areas and facilities, rather than elaborate indoor facilities. In addition, an active Travel and Publicity Department, functioning much like the Alaska Travel Division, directs its efforts toward attracting the rising volume of tourists to and through the Yukon.

The Yukon Territory faces a number of recreation-related challenges in the coming years, some of which are similar to those foreseen for Alaska. Ever-increasing volumes of tourists are exerting heavy pressures on existing campground facilities, and there is fear that the program will not be able to keep up with the growth. Moreover, those responsible for the program face challenges in determining the size of campgrounds and the types of services which campers will need in the coming years with increased use of more self-sufficient mobile camping units.

There is also concern regarding creation of a national park in the Yukon Territory, with strong feelings on both sides of the issue. A vociferous segment of the population feels quite strongly that no part of the Territory should be withheld from mining and other forms of development. Many feel, however, that important parklands in the Territory must be preserved now, while they are still relatively untouched by man.

E - AREAS WITH FUTURE RECREATION POTENTIAL

The purpose of this final section of the chapter is to identify some of the most significant areas in Alaska with high recreation potential, and to discuss briefly the opportunities in each area. Because of the sheer magnitude of the areas potentially available for recreation in Alaska, and the lack of complete information at this time, the material which follows is not intended as a comprehensive catalog of all areas with future potential. Instead, drawing upon the opinions and suggestions of recreation specialists in Alaska, it presents current thinking about selected areas which deserve consideration in future recreational development. These areas are shown in Exhibit IV-20, following.

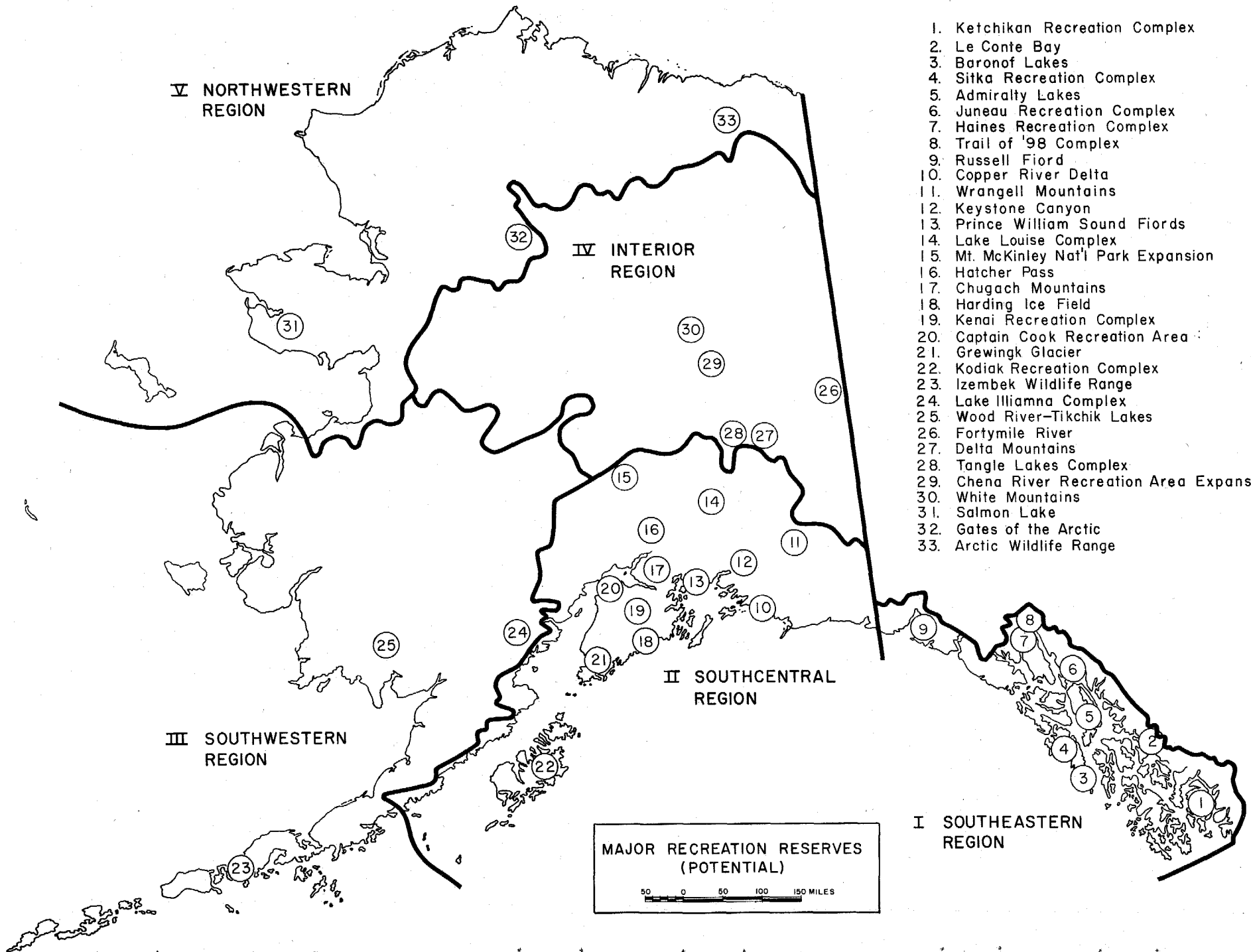
The information presented comes largely from work done in conjunction with the Federal Field Committee study which resulted in the publication, "Alaska Natives And The Land." The National Park Service collected ideas and recommendations from Alaska's major land managing agencies, and summarized the data for the Federal Field Committee.

The discussion is divided into five parts, each covering opportunities in one of the five recreation planning regions. The numbers shown in the text correspond to the numbers on Exhibit IV-20, for ease of reference.

SOUTHEASTERN ALASKA

In addition to the large amount of potential wilderness discussed earlier, eight other areas have been identified as having high future recreation potential.

1. Ketchikan Recreation Complex, at the State's southernmost port of entry, offers a significant opportunity for hiking, camping, picnicking, boating and winter sports activities in a beautiful natural setting.
2. Le Conte Bay Scenic Area, near Petersburg, contains the Le Conte Glacier, one of the world's fastest-moving glaciers, and thus offers the potential for a spectacular scenic area.
3. Baranof Lakes Recreation Area, to the south of Sitka on Baranof Island, includes a number of lakes of high potential for recreational development and use.



1. Ketchikan Recreation Complex
2. Le Conte Bay
3. Baronof Lakes
4. Sitka Recreation Complex
5. Admiralty Lakes
6. Juneau Recreation Complex
7. Haines Recreation Complex
8. Trail of '98 Complex
9. Russell Fiord
10. Copper River Delta
11. Wrangell Mountains
12. Keystone Canyon
13. Prince William Sound Fiords
14. Lake Louise Complex
15. Mt. McKinley Nat'l Park Expansion
16. Hatcher Pass
17. Chugach Mountains
18. Harding Ice Field
19. Kenai Recreation Complex
20. Captain Cook Recreation Area
21. Grewingk Glacier
22. Kodiak Recreation Complex
23. Izembek Wildlife Range
24. Lake Iliamna Complex
25. Wood River-Tikchik Lakes
26. Fortymile River
27. Delta Mountains
28. Tangle Lakes Complex
29. Chena River Recreation Area Expansion
30. White Mountains
31. Salmon Lake
32. Gates of the Arctic
33. Arctic Wildlife Range

MAJOR RECREATION RESERVES
(POTENTIAL)

50 0 50 100 150 MILES

4. Sitka is already one of the main tourist attractions in Southeastern Alaska, and has the potential for significant expansion. The National Park Service would like to explore the possibility of preserving and restoring a number of additional historic and cultural features of the area, including the village stockade wall, the trading post, the Kolosh (Indian) church, and the old blockhouse. These areas might be added to the existing Sitka National Monument. There are also opportunities to develop interpretive trails, hiking trails, boating facilities and campgrounds throughout the immediate vicinity of Sitka. In addition to historic and cultural attributes, the scenic waterways of this area and its open ocean exposure are prime drawing cards for resident and visiting Alaskans.

5. Admiralty Lakes Recreation Area offers a significant potential for fishermen, campers and canoeists, and can provide both primitive or wilderness-oriented recreation and more sophisticated types. The area, located approximately 50 miles from Juneau, contains approximately 110,000 acres, and 10 lakes larger than 100 acres.

6. Juneau Recreation Complex. A variety of developments have been proposed for the immediate environs of the State's capital city, all of which would capitalize on its icefields, Mendenhall Glacier, and the magnificent scenic, cultural and historic assets. Winter sports areas, with winter and summer skiing, have been proposed for the Juneau icefields and in Fish Creek Valley on Douglas Island. There are many opportunities to develop hiking trails, picnic areas and campgrounds. In addition, the historic and cultural attributes of this area provide a high potential for protection and development. An ever-increasing volume of tourists coming by air and water makes development of the recreation potential around Juneau of major importance.

7. Haines Recreation Complex would provide for a variety of mountain- and water-based activities. Overnight facilities would be provided around a community that is located at the junction of two major transportation routes - the State ferry system, and the Haines cutoff which connects with the Alaska Highway. The Dalton Trail to the Dawson City (Yukon Territory) gold mining area started in Haines and is worthy of preservation. The revitalization of the Tlingit culture may be witnessed in art and dance exhibitions at Port Chilkoot, and nearby is the greatest concentration of bald eagles in North America. Outdoor activity in both winter and summer benefits from a climate with the least amounts of rainfall and cloudiness in Southeastern Alaska.

8. Trail of '98 Complex - including Skagway, the landing place for thousands of gold seekers and the oldest incorporated city in Alaska, as well as the Chilkoot Trail from Dyea (Alaska) to Lake Bennett (British Columbia) - would preserve remnants of a colorful era in Alaskan history and would provide excellent opportunities for sightseeing, camping, and trail-related activities.

9. Russell Fiord, located near Yakutat, is a spectacular area of approximately 100,000 acres wherein two glaciers flow directly into the fiord's salt water. The area, served by boat and air, could also be reached by vehicle on completion of the proposed Yakutat road system.

In addition, it is envisioned that an inter-island highway system will soon be developed in Southeastern Alaska which, when combined with short ferry hops, will provide additional access to a tremendous amount of land in this region for both resident and nonresident recreation.

SOUTH CENTRAL ALASKA

South Central Alaska has a number of areas with high recreation potential for protection and development.

10. Copper River Delta Waterfowl Management Area is a famed nesting spot on Prince William Sound. This area, which will become easily accessible upon completion of the scenic highway or parkway up the Copper River, will provide photography and hunting opportunities for recreationers.

11. Wrangell Mountains Recreation Area, adjacent to the Canadian border, provides a significant opportunity for one of Alaska's most interesting and esthetic wildernesslike recreation areas. A National Scenic Parkway is being considered for the area between Copper River and Chitina Valley; such a parkway could open up a beautiful and historical area for hunters, camera enthusiasts, boaters, nature lovers and winter sportsmen.

12. Keystone Canyon State Park is an extremely scenic area near Prince William Sound. This site has long been regarded as an ideal location for a park, and it was proposed in "Parks For America" that 640,000 acres should be set aside for this single use. The natural beauty of the area, with its waterfalls and steep overhangs, makes only minimal development appropriate. Trails along historical routes could be reopened, and scenic turnoffs and interpretive facilities provided for visitors, together with improved campgrounds. The emphasis thus would be upon the preservation of scenic qualities and the interpretation of geological and historical attributes.

13. Prince William Sound Fiords include massive tidewater glaciers, mountains rising to 10,000 feet, and lush coastal forests. The area's Columbia glacier may be viewed closely from boats, thus permitting visitors to hear and see the ice break and fall from the glacier.

14. Lake Louise and Monahan Flats Recreation Complexes are connected by rivers, lakes and overland portages, and are located close to the population centers of the Greater Anchorage and Matanuska-Susitna Boroughs. These areas could provide both residents and visitors with tremendous fishing, hunting, canoeing, boating, and winter sport opportunities, as well as large tracts for the enjoyment of a natural primitive environment.

15. Mt. McKinley National Monument was proposed by former Secretary of the Interior Stuart Udall to add parklands around the present Mt. McKinley National Park. The Monument, which would include 2.2 million acres (mostly in South Central Alaska, along the southern borders of the Park), would protect the migration routes of the Park's caribou, and would preserve an area surrounding an impressive system of gigantic glaciers to the south of Mt. McKinley.

16. Hatcher Pass, on the south side of the Talkeetna Mountains overlooking the Matanuska and Susitna Valleys, would provide a full range of mountain recreation, complementing the water-based activities to be provided in the State's nearby Nancy Lake Recreation Area. The mountains of this area should be evaluated for their potential as a major alpine skiing area, and evidences of historic gold mining operations should be preserved.

17. Chugach Mountains Recreation Area has been suggested as a State- or Borough-administered recreation complex, providing game management, water conservation, and recreation opportunities for a wide range of activities. This location, within easy driving distance from Anchorage, could provide a beautiful and convenient setting for bird and game watching and study, hiking, driving for pleasure, horseback riding, mountain and glacier climbing, and snowmobiling.

18. Harding Ice Field, an immense expanse of snow and ice near Seward on the Kenai Peninsula, could be made accessible by road, thus giving both summer and winter visitors an opportunity to view and enjoy the perpetual ice and snow which constitute one of Alaska's most striking features.

19. Kenai National Recreation Area, encompassing 1,300,000 acres in the Chugach National Forest, could provide both developed and natural environment recreation opportunities. Trails for year-round use, roads (in some parts), campgrounds, scenic overlooks, interpretive services and winter sports sites have been proposed.

20. Captain Cook Recreation Area is a recently authorized 2,000-acre park on the Kenai Peninsula, in the vicinity of Swanson River and Stormy Lake. It will provide a unique opportunity for recreational development, with a saltwater bay, a river, and a freshwater lake all within one mile of each other and accessible by gravel roads. The river is already receiving heavy use as a canoe route, and its utilization will be substantially increased with the construction of the Turnagain Arm Bridge. Tentative plans, which call for such facilities as campgrounds, picnic areas, swimming beaches, cabins, hiking trails, and boat ramps, contemplate the beginning of construction in the fall of 1970.

21. Grewingk Glacier flows out of the mountains on the south side of Kachemak Bay, which is renowned for its natural beauty, agreeable climate, and fish and wildlife resources. The heavily forested shores of the bay and its tributary fiords would be a worthy destination for visitors, who would reach the area by boat.

22. Kodiak Recreation Complex would provide excellent hunting and fishing, and would at the same time preserve sites built by Russian colonists in the 18th century and by the U. S. military forces in World War II in and near one of Alaska's urban areas.

SOUTHWESTERN ALASKA

Two main areas with high recreation potential have been identified in Southwestern Alaska, and one wildlife refuge has been singled out for its recreation potential.

23. Izembeck Wildlife Range on the Alaska Peninsula would provide excellent hunting and fishing in a rugged environment.

24. Lake Iliamna Recreation Complex is a highly scenic area which provides some of the finest rainbow trout fishing in the world, as well as red salmon spawning beds, Dall sheep, and one of the most spectacular glacier-carved mountain passes in Alaska. Developments in such a complex would be minimal.

25. Wood River - Tikchik Lakes has long been considered potentially one of the finest recreation areas in Alaska. The region combines a concentration of lakes, rivers and mountains with tremendous fishing potential. The lakes and rivers are crystal clear, and are connected by rivers to provide a scenic waterway system unparalleled even in Alaska.

INTERIOR ALASKA

This region, with its rich variety of terrain, has three areas with significant potential for future recreation.

26 and 30. The Fortymile and White Mountain areas, connected by the Yukon River recreation corridor east and north of Fairbanks, could be developed as recreational complexes to serve a wide range of the camping, hunting, fishing, boating and trail-related activities demanded by the residents of the State's second largest urban area.

27 and 28. The Delta Mountains and the Tangle Lakes Complex offer canoeing, mountaineering and sightseeing along the north slopes of the Alaska Range.

29. Chena River Recreation Area is an undeveloped 14,500-acre site, set aside by the State Legislature in 1967 on the upper Chena River, northeast of Fairbanks. This area could serve as a major recreation complex for the greater Fairbanks area, and is accessible by road, water and air.

NORTHWESTERN ALASKA

Three locations in the Northwestern Region have been suggested as having high recreation potential.

31. Salmon Lake Recreation Complex, accessible by vehicle from Nome, offers recreational possibilities for both residents and visitors. The lake is used by salmon for spawning, nearby streams provide fishing opportunities, and the surrounding area offers a potential for gold panning as well as viewing reindeer and tundra scenery.

32. Gates of the Arctic (also called the Alatna-Kobuk Region) is one of the richest potential recreation areas to be found anywhere in Alaska, and was recently proposed for National Park status. Located on the south slope of the Brooks Range, the area separates the boreal forests to the south from the Arctic tundra to the north. Bare rock and muskeg meet here, and some of the oldest spruce in Alaska are found in this locale. Wildlife abounds (37 species of mammals), fishing is excellent, and more than 150 species of birds have been recorded in the surrounding area. Walker Lake within this site has long been considered as having national significance due to its northern lake beauty. Approximately 20 other lakes in the area will accommodate small float planes. Geologically and ecologically, the area is also interesting, with the mountains evidencing a wide variety of geological characteristics, and the blending of tundra with boreal forests, with their associated plant and animal species, providing a fine opportunity for studying a border zone.

33. The Arctic Wildlife Range is becoming increasingly popular as the ultimate experience in wilderness recreation. Located on the Arctic Slope where the Brooks Range and the Arctic Ocean are at their closest, this vast region contains a great variety of plant and animal life.

PRESENT AND FUTURE DEMAND FOR OUTDOOR RECREATION



Snowshoe baseball in the Interior

V - PRESENT AND FUTURE DEMAND FOR OUTDOOR RECREATION

This chapter describes the present and anticipated future demands for outdoor recreation by residents and by nonresident visitors to Alaska. The chapter is based primarily on data generated during several surveys conducted by the Parks and Recreation Section of the Alaska State Department of Natural Resources, and is divided into the following parts:

- A - Introduction And Methodology - which provides background on the approach which was used to collect demand data and prepare estimates of future demands.
- B - Characteristics Of Present And Future Outdoor Recreation Demand - which analyzes current demand in some detail, and forecasts future outdoor recreation demand.
- C - Comparative Analysis Of Outdoor Recreation Demand - which compares the overall and regional popularity of each activity for residents and nonresidents.

A - INTRODUCTION AND METHODOLOGY

This section provides a brief background on the concept of estimating recreation demand, describes the basic methodology used, and discusses the limitations of the methodology.

INTRODUCTION

Estimating demand for outdoor recreation is a critical part of the outdoor recreation planning process, since demand, when compared with the supply of recreation facilities, determines the need for additional facilities - the central element in developing a plan of action.

Because of cost and time constraints, the process of estimating demand for outdoor recreation generally involves estimating the behavior of a large population, on the basis of a carefully chosen sample. The field of statistics, however, is sufficiently advanced to permit testing of the sample data to ensure its adequacy for the purpose of making estimates and drawing inferences. Thus, while the demand estimation process is not an exact science, it is sufficiently accurate to allow meaningful conclusions to be drawn.

The objective of the estimation process is to provide a reasonable measure of demand which can be compared with the present or programmed supply of recreation facilities to determine the magnitude of unsatisfied demands. Particularly useful in this endeavor is such information as: (1) the proportion of residents and nonresidents participating in an activity; (2) the average number of days (on both a per capita and a per participant basis) spent pursuing an activity during the year; and (3) assumptions regarding the proportion of total annual demand that will be experienced on a peak or average seasonal day,* since it is this level of demand that the supply is intended to satisfy.

In addition to providing reasonable measures of demand for comparison with the supply of facilities, relative magnitudes of demand can be inferred from sample information on an interregional and interactivity basis. For example, if Southeastern Alaska indicated 15 annual days per capita participation in a given activity versus 8 days for South Central Alaska, a number of possible reasons might be examined, such as: (1) a greater supply of the appropriate areas and facilities in Southeastern Alaska; (2) more favorable climatic conditions; or (3) a stronger preference by residents of Southeastern Alaska for participation in this activity. Comparisons of this kind offer additional insight into the demand for outdoor recreation within the State.

*Peak or average seasonal day - an estimate of the number of people in a region who will participate in a given activity on an average (for nonresidents) or peak (for residents) day during the outdoor recreation season. It should be noted, however, that variations among regions in the timing of peak or average seasonal days make it impractical to speak of a Statewide peak or average day. Peak days are used for residents because most demand by residents occurs on weekends. In the short summer season, for example, the peak demand can be a high percentage of the total annual demand. However, extreme peak demand, as found on such days as the fourth of July, is not considered, because construction of facilities to meet this infrequent large demand is not economically justifiable. Nonresidents, on the other hand, are assumed to participate in activities more evenly throughout their vacations. Therefore, average seasonal day is a preferred term to describe the nonresident demand.

Forecasting demand is the final step in the demand estimation process. This generally involves making assumptions about changes in participation to be expected from such underlying factors as population increases, more time available for recreation, rising income, and improved mobility, and applying these projected changes to current levels of participation. With reliable forecasts of future demand, it then becomes possible to estimate the needs for additional facilities and to design a plan of action to meet these needs.

METHODOLOGY

This section describes in more detail the methodology used to estimate current and future outdoor recreation demand. The following specific steps of this process are discussed below:

- Selection of activities for intensive study
- Distinction between nonresident and resident demand
- Collection and interpretation of data
- Estimation of future participation in outdoor recreation.

Selection Of Activities For Intensive Study

From the total of 50 activities for which sample data were collected, 14 major activities were selected for intensive study and were reviewed with the Alaska Outdoor Recreation Council. Many of these 14 are made up of several subactivities; they are listed in Exhibit V-1, on the following page, in the order of their discussion in this chapter. A number of factors influenced the selection of these particular activities.

First, only those activities were selected for which formal planning and provision of land or facilities can make an important contribution to satisfying demands for participation. This led to the elimination of activities such as photography and gold panning. Because it is difficult to evaluate the supply of photography resources, planning is nearly impossible; and any program to increase the feasibility of gold panning faces obvious cost barriers and thus would be impractical.

Activities were also selected on the basis of the number of people who would benefit. Those activities with high levels of participation in the State were generally selected over those with lower levels of participation, since a basic objective of the planning effort was to provide the development program of benefit to the most people.

RECREATION ACTIVITIES SELECTED FOR INTENSIVE STUDY

Trail-related activities

- Walking for pleasure
- Nature study
- Bicycling
- Hiking
- Snowmobiling
- Motorcycling
- Snowshoeing
- Canoeing
- Horseback riding
- Dogsledding
- Cross-country skiing
- Mountain climbing with gear

Sightseeing

Driving for pleasure

Picnicking

Fishing

- Freshwater
- Saltwater
- Ice

Boating

- Motorboating

Camping

Swimming

- Lake and stream swimming
- Pool swimming
- Ocean swimming

Hunting

- Big game
- Small game
- Waterfowl

Outdoor games and sports

- Golf
- Tennis
- Other

Ice skating

Snow play

Flying for pleasure

Alpine skiing

However, activities which had currently low participation rates but which respondents identified as needing more facilities were analyzed on the assumption that an increase in facilities could lead to important increases in future demand.

Activities were also included for analysis when significant future increases in participation were anticipated. In recent years, there have been dramatic changes in the popularity of certain outdoor recreation activities. Often these are activities which offer increased mobility for participation in other activities, but are also separate outdoor recreation activities themselves. The dramatic increase in the popularity of snowmobile travel is an excellent example of this kind of recreation activity. Planning for outdoor recreation must attempt to anticipate similar future changes.

Distinction Between Nonresident And Resident Demand

Total demand for outdoor recreation is the sum of the demand by residents and nonresidents. Several key factors distinguish resident from nonresident demand and make it advantageous to discuss the two separately. First, the majority of nonresidents visit the State during the summer months, thus limiting their participation largely to summer activities. Second, as indicated by the recent study of Alaskan tourism by Cresap, McCormick and Paget, nonresidents generally lack specific knowledge of Alaska's recreational opportunities and therefore cannot fully participate in many activities. In addition, the average age of nonresident visitors is substantially higher than that of Alaskan residents, and this significantly influences both the type of outdoor recreation activities in which they participate and the extent of such participation. Finally, nonresidents are much more selective in their choice of outdoor recreation activities than residents, as will be shown in Section C of this chapter (they participate significantly in only a half-dozen activities).

Collection And Interpretation Of Data

The collection of data on outdoor recreation in Alaska, the techniques used to analyze the data, and the statistical significance of the results are described below.

1. Collection of participation data. Resident and nonresident data were collected separately. For residents, the Parks and Recreation Section of the Alaska Division of Lands collected the basic sample data on participation in outdoor recreation. Using essentially the same questionnaire (shown in the separate volume of Appendixes) as the one developed by the Outdoor Recreation Resources Review Commission for that agency's demand surveys in 1960-61, State representatives interviewed 1,317 individuals between

October 1966 and January 1967 to obtain information on preferences and rates of participation for 50 recreational activities. The sample was selected at random from lists of electric utility subscribers and telephone directories, and individual respondents were chosen by a random selection method from each of the houses identified for sampling.

In preparation for the present planning effort, the information which had been collected from the sample was reviewed. This review pointed out a number of weaknesses in the data, including:

- The absence of data from the Southwestern Region of the State
- The small sample from the Northwestern Region (74 interviews)
- The bias created by selecting from utility and phone lists, resulting in very little information from the native and white population not subscribing to these services
- The statistical reliability problems with parts of the sample created by breaking information into subgroupings so small that the number of samples in the subunit did not provide reliable statistics.

In addition, the questionnaire and the technique itself appeared to have some shortcomings.

- Because individuals under the age of 12 were excluded from the survey, no information was gathered on the special demands of this group, particularly regarding their greater participation in such urban activities as football, baseball and other playground activities.
- The technique relied on the individual's memory to estimate the number of days spent enjoying each activity over the past year. This may or may not yield reliable information about actual participation. Furthermore, respondents in such a survey are likely to enlarge their estimates of participation in activities they may genuinely wish to have enjoyed more, or because they assume the interviewer would prefer hearing about a greater volume of participation.
- Asking respondents about what they did in the past provides no measure of latent demand for activities not now feasible because of a shortage of facilities, too great a distance, too much expense, or other factors.

- The activities identified in the questionnaire are frequently not meaningful in terms of Alaska's native communities, which have their own unique recreation sports and activities.
- Neither the technique used nor any now known can provide accurate information about activities not currently enjoyed. For example, few people anticipated the major boom in snowmobiling that has been experienced in Alaska; no statistical technique now in use would have forecast the magnitude of this demand.

Even with the shortcomings associated with the technique, it was judged to be the best approach currently available for analyzing outdoor recreation demand. As a result, the decision was made to enlarge the earlier sample to overcome some of the problems of bias and reliability, and to supplement the sample information with other material, obtained from research and interviews, that would aid in evaluating the character of present demand.

An additional 328 samples were collected during June and July of 1968 in Northwestern and Southwestern Alaska, using a random area technique to avoid the biases of utilities or telephone subscription lists. The final sample of 1,645 residents provided data with reasonable statistical reliability for each of the State's five regions. Exhibit V-2 shows the distribution of this sample by region and borough or city.

For nonresidents, the Planning Task Force and the Alaska Travel Division of the Department of Economic Development developed a sampling approach, consisting of two sample elements, to serve the needs of both groups.

The first element consisted of 1,479 mail-back questionnaires, distributed to nearly all exiting visitors over two one-week periods during the summer of 1968. An additional one-week sample, to collect information about winter demands, was collected in March 1969.

The second element involved 617 randomly selected personal interviews with exiting visitors. These interviews were intended to provide in-depth information not provided in the brief mail-back questionnaires. Copies of the mail-back questionnaire and the interview questionnaire are included in the volume of Appendixes.

The two sample elements, together with the consultants' own materials and knowledge (developed during a one-year study of Alaska's tourism), made it possible to develop a profile of present and projected nonresident outdoor recreation demand.

SOURCES OF SAMPLE FOR SURVEY OF
RESIDENT DEMAND FOR OUTDOOR RECREATION

<u>Region And Borough Or City</u>	<u>Sample Size</u>
Southeastern	
Greater Juneau Borough	151
Greater Sitka Borough	101
Gateway Borough	<u>125</u>
Subtotal	<u>377</u>
South Central	
Greater Anchorage Borough	215
Kenai Peninsula Borough	173
Kodiak Island Borough	88
Matanuska-Susitna Borough	106
Elmendorf AFB and Ft. Richardson	<u>76</u>
Subtotal	<u>658</u>
Southwestern	
Bristol Bay Borough	50
Nondalton	10
Dillingham	50
Bethel	<u>90</u>
Subtotal	<u>200</u>
Interior	
North Star Borough	<u>208</u>
Northwestern	
Nome	74
Kotzebue	58
Ambler	10
Barrow	<u>60</u>
Subtotal	<u>202</u>
Total	<u>1,645</u>

2. Collection of area-based data. In addition to the quantitative data on participation, area-based data were gathered on what users of recreational facilities do, what they like and do not like, and other qualitative information about existing facilities. This information sometimes provides additional insight into user reactions, and can help to confirm or deny material developed in the demand surveys. Examples of this type of information are:

- The 1964 survey of campers summarized in the Department of Natural Resources publication, "Alaska Campers 1964"
- Periodic counts by maintenance personnel of campground utilization, providing data on numbers of vehicles observed at various campgrounds, with a breakdown of Alaskan versus out-of-State license plates
- Information similar to area-based data, supplied by many officials in the State, such as the number of resident and nonresident fishing and hunting licenses issued, the scope of fish and game harvests, aircraft takeoffs and landings, or automobile and boating registrations.

Where possible, this information was used to supplement statistical demand data in the discussion of individual activities. However, not all of this information was used, because of limitations of some of the data.

3. Preliminary data processing. The data regarding resident and non-resident participation, as derived from in-person interviews, were first processed by the State on computers, to yield the information needed for analysis and determination of the statistical reliability of the sample. This information included:

- The proportion (percentage) of the population participating in each activity
- The average number of participation days* per year for each activity

*"Participation day" is the basic unit of participation used in this plan. A participation day is any portion of a 24-hour period in which an individual participates in a recreation activity. For example, a person who, in the course of one 24-hour period, camps overnight, picnics, and walks over a scenic trail would be said to have enjoyed three participation days of activity (one for each activity).

- The average number of participation days of all respondents, regardless of whether or not they participated in a given activity
- Statistical measures of the variation in responses (detailed information on this matter is presented in the Appendixes)
- Formulas for testing the statistical reliability of the sample for use in estimating the demand for outdoor recreation in the State (detailed information on these formulas is also contained in the Appendixes).

Basic data on the proportion of the resident population participating and the average numbers of participation days were also analyzed on the basis of the respondents' socioeconomic characteristics, such as age, sex, income, etc. The objective of this effort was to determine whether participation was strongly related to any particular economic or sociological characteristic. A computer program developed earlier by the University of Alaska was used to process the data, and this program provided a great deal of additional information regarding latent demands which are not now being satisfied.

4. Final processing and analysis. The computer tabulations of data were then sent to the consultants for analysis, along with the unprocessed data from the nonresident mail-back questionnaires.

For residents, the basic statistics on the average number of participation days per capita for each region were multiplied by the population in the five regions and totaled for the State as a whole to obtain estimates of current total annual participation for each activity. The annual volumes were then reduced to estimates of participation in each activity on a peak seasonal day. The techniques employed in the allocation process are described in the Appendixes.

Statistical tests on the data proved that the sample taken was sufficiently reliable to be used in estimating the proportion of the State's population participating in an activity and the average number of days (per capita) of participation per year. Despite this statistical reliability, there were two unusual characteristics of the data which should be considered in interpreting the estimates presented in Section C of this chapter.

First, the volume of participation by Alaskan residents was above what might have been expected. For example, the data indicated that, on typical peak seasonal days in 1967, about 16,800 residents of South Central Alaska were engaged in freshwater fishing, 27,300 were sightseeing, 12,500 were motorboating, and 10,200 were hunting. These figures appear somewhat

high when one considers that the region's 1967 population was 140,000. The annual figures also are quite high, with the typical Alaskan generating well over 200 participation days of outdoor recreational activity each year.

Alaskan participation also appeared somewhat high when compared with other states, as shown in the following table comparing participation in six activities in Alaska, Washington, North Dakota, and the total United States (Alaskan data collected in 1966-1968, all others based on 1965 data):

<u>Activity</u>	<u>Participation Days Per Capita (Rounded)</u>			
	<u>Alaska</u>	<u>Washington</u>	<u>North Dakota</u>	<u>Nationwide</u>
Picnicking	12	8	6	3
Hunting	6	2	3	(a)
Camping	5	5	3	1
Fishing	10	6	5	2
Swimming	6	10	9	7
Alpine Skiing	1	1	5	(a)

(a) No comparable statistics available.

A number of factors may contribute to the high volume of participation in Alaska. One of these is the fact that nearly all Alaskans are continually exposed to the State's rich recreation resources. From downtown Anchorage, the State's largest city, one can easily see beautiful mountains and other points of scenic and recreational interest. Most Alaskan communities are adjacent to fantastic recreational resources, although greater accessibility is necessary to take full advantage of them.

The effect of this proximity of recreational resources is more clearly shown in Exhibit V-3, which indicates the proportions of demand which occurred under the following four circumstances:

- Neighborhood participation - activity carried out near the participant's home, when he had only a few hours available for outdoor recreation
- Outing - outdoor recreational activity away from home, occupying the better part of a day

CIRCUMSTANCES OF RESIDENT PARTICIPATION
IN OUTDOOR RECREATION ACTIVITIES

Activity	Percentage Of Participation Days By Type Of Occasion			
	<u>Neighborhood</u>	<u>Outing</u>	<u>Trip</u>	<u>Vacation</u>
Trail-Related				
Walking for pleasure	80%	6%	2%	12%
Nature study	62	15	5	18
Bicycling	93	4	1	2
Hiking	45	13	13	29
Snowmobiling	95	2	1	2
Motorcycling	93	1	1	5
Snowshoeing	92	4	1	3
Canoeing	37	13	13	37
Horseback riding	53	8	-	39
Dogsleding	87	6	-	7
Cross-country skiing	88	12	-	-
Mountain climbing with gear	37	18	25	20
Sightseeing	55	11	5	29
Driving For Pleasure	75	6	2	17
Picnicking	47	24	8	21
Fishing				
Freshwater	51	14	13	22
Saltwater	49	18	20	13
Ice	88	4	2	6
Boating	63	10	9	17
Camping				
In developed areas	12	2	29	57
In remote areas	13	-	23	64
Swimming				
Lake, pond, stream	57	12	7	24
Pool	45	3	1	51
Ocean	45	19	1	35
Hunting				
Big game	34	12	16	37
Small game	54	9	10	26
Waterfowl	50	10	13	27
Outdoor Games And Sports				
Tennis	78	13	-	9
Golf	70	4	-	26
Other	85	6	2	7
Ice Skating	97	3	-	-
Snow Play	97	3	-	-
Flying For Pleasure	74	7	3	16
Alpine Skiing	84	11	3	2

- Trip - an occasion when the participant was away from home one or two days for the purpose of outdoor recreation
- Vacation - an occasion when the participant was away from home longer than three days.

For many activities, from 50 to 97 per cent of the participation occurred as neighborhood participation, within a short distance from the participant's home. This is quite likely the exact opposite of the situation found in the balance of the United States, where the greater part of outdoor recreational demand occurs on outings, trips, or vacations. These figures are discussed further in later sections of this chapter.

Also, in Alaska, the greater abundance of outdoor recreational opportunities vis-a-vis other states increases the likelihood of multiple-activity participation during any one outing. Thus, during a fishing trip, a person might drive his car to his boat moorage, view scenic sights along the way, eat lunch (picnic) while he is out in his boat, and perhaps camp overnight before he returns home. For such an outing, the participant could report participation in four or five activities during a single 24-hour period, and one participation day would be recorded statistically for each activity.

Moreover, the sampling itself may have introduced some upward bias in the data. Some of the respondents may have desired to please the interviewer by giving him a particularly enthusiastic response, with some exaggeration of participation. Similarly, the respondent may have indicated high levels of participation as the result of liberal definitions of recreational participation. For example, it might be reasonable to expect a resident Alaskan to do some sight-seeing on his way to work, on a particularly fine day.

The second significant characteristic of the data was the apparent wide variation in the number of days of participation per participant in most activities. This condition appeared throughout the data and, surprisingly, was not reduced by analyzing the data in terms of socioeconomic variations. The causes of these wide ranges in participation days are not understood with any degree of certainty at this time; budget and time limitations prevented the preparation of frequency charts which would describe the actual shape of the distribution and might assist in explaining these variations.

Despite the reservations expressed above, statistical tests have proved the reliability of the data for use in estimating the proportion of the State's population participating in each activity and the average number of participation days annually. The data are considered particularly sound as indicators of the relative popularity of different activities and variations in participation from one region to another.

Final processing of the nonresident data involved determining the annual volume of nonresident participation - the result of multiplying annual participation days per tourist for each activity by the number of visitors to the State. This annual volume of demand was then converted to estimates of participation on an average seasonal day, by activity, for each of the State's five planning regions. This process is described in detail in the separate volume of Appendixes.

Estimation Of Future Participation In Outdoor Recreation

Participation in outdoor recreation in Alaska is expected to increase significantly in the future, on the part of both residents and nonresidents. However, the forecasting of specific future outdoor recreation demand is a very inexact process at this time. Experts recognize that demand will rise, of course, with increases in the population, but beyond that, determinants of demand are less certain. Time, income and mobility (the so-called T-I-M factors) are recognized as key influences on future demand, as are age, education, and many other socioeconomic variables. Another very important determinant of present and future participation, although obvious, is frequently overlooked. This factor, the availability of recreation areas and facilities, is quite important in Alaska, even though no one really can predict what demand may be expected on a new golf course, ski slope or tennis court.

Because recreation forecasting is so inexact, many approaches are currently used.

- Most common, of course, is the judgmental approach; depending on the experience, skill and luck of the forecaster, this often proves to be a most reliable technique.
- Used less frequently, but much in vogue, is trend analysis. This involves determining how many people participate (or how frequently they participate) in activity X during one period, reviewing the situation for a later period, and extending any change into the future. More sophisticated trend analyzers spend time evaluating the change to isolate special influences (such as increased facilities), and then modify the extrapolation accordingly.

- A third method, and perhaps one of the soundest, is component analysis. It involves breaking down the activity or element which is being analyzed into the components which influence its behavior, and then using reliable information about the expected changes in the components to forecast a change in the element. This is the basic approach which the ORRRC studies adopted, using multi-regression (sometimes termed multivariant) analysis to estimate the interrelationships between socioeconomic variables and recreation demand.

In preliminary preparations for the present plan, it was hoped that a multivariant technique might be utilized to develop sound estimates of future demand. Unfortunately, analysis indicated that this technique would have limited value in Alaska for three principal reasons:

- First, except for population, there are no reliable socioeconomic forecasts for Alaska; in fact, reliable forecasts may be impossible because of the State's size and wide range of possible futures. Without good forecasts for the component factors which influence future demand for participation, the component technique becomes nearly useless.
- Second, even with reliable socioeconomic forecasts, if there is no strong relationship between variations in socioeconomic characteristics and variations in recreation demand, then forecasts based upon such variations would have no value.
- Third and equally important, as was discussed previously, Alaska appears to have a shortage of facilities for many of the activities which residents and nonresidents would like very much to enjoy. Just the provision of an additional ski area or tennis court might generate a substantial increase in demand which the component approach would not identify.

These considerations led to the adoption of modified techniques for forecasting the growth of demand by both residents and nonresidents, as described below.

Residents. For residents, projections of future recreational activity were made by combining projections of the assumed increase in participation per capita and the anticipated population growth. These two factors together give the estimated total increase in participation in outdoor recreation for the State's residents.

The projections of assumed annual participation per capita were developed by first reviewing data prepared by the Bureau of Outdoor Recreation (and published in the pamphlet, Outdoor Recreation Trends) regarding expected national increases in per capita participation for various activities, and then adjusting the data to reflect expected changes in Alaska. These adjusted rates of change are presented in Exhibit V-4. This upward revision of the rates of increase reflects the anticipation of greater growth, on a relative basis, in the so called T-I-M factors (leisure time, income and mobility). These factors are discussed briefly below.

Personal income per capita in Alaska is approximately the same as that found in other western states, and is above the nationwide figure. However, a regional breakdown indicates that Southwestern and Northwestern Alaska have per capita personal income levels approximately two-thirds the level of the Statewide figure, as shown in the following table:

<u>Region</u>	<u>1965 Per Capita Personal Income</u>
Southeastern	\$3,043
South Central	3,476
Southwestern	1,985
Interior	3,585
Northwestern	2,053
Total Alaska	\$3,187

Source: George W. Rodgers, University of
Alaska: Social, Education and
Government Report #15.

In these regions, significant future changes in personal income could influence total participation in outdoor recreation in the State. For the balance of the State, healthy increases in income per capita may result from the higher level of economic activity expected in the future as the State's industrial base broadens. In this event, larger personal incomes may result both in absolute increases in the volume of outdoor recreation activity and in changes in the popularity of certain activities (that is, beyond a certain level, increases in income will likely produce a shift from less expensive to more expensive outdoor recreation activities).

ASSUMED PERCENTAGE INCREASES IN
THE ANNUAL NUMBER OF PARTICIPATION DAYS PER CAPITA
FOR 14 MAJOR RECREATIONAL ACTIVITIES

	Assumed Percentage Increases In Annual Participation Days Per Capita		
	<u>1967 To 1975</u>	<u>1967 To 1980</u>	<u>1967 To 2000</u>
Trail-related activities(a)	7%	11%	32%
Sightseeing	12	18	48
Driving for pleasure	10	16	28
Picnicking	6	12	24
Fishing	10	14	20
Boating	15	30	75
Camping	14	29	86
Swimming	15	26	67
Hunting	8	12	20
Outdoor games and sports	15	22	63
Ice skating	8	12	20
Snow play	8	12	20
Flying for pleasure	8	15	30
Alpine skiing	15	35	75

(a) Weighted average of assumed increases in component activities.

Leisure time and the proportion of this time used for outdoor recreation were also considered to be important influences on future demand. Unfortunately, any analysis and projection of the amount and utilization of leisure time is complicated by conditions in Alaska. For example, employment in much of the economy is seasonal; many people have long periods with considerable leisure time available, followed by periods of employment which typically involve more than normal workloads.

Despite these conditions, leisure time was projected to increase at least at the national rate, principally because most of the Alaska work force will be influenced by nationwide policies. Leisure time of government workers will be influenced by employment policy decisions in Washington, D. C. Changes in the amount of leisure time of workers in the basic industries, such as petroleum and construction, will probably be directly influenced by labor negotiations for these workers throughout the country.

Mobility - the ability to move from one's residence to a recreational area or between areas - is a particularly important consideration in estimating future recreation demand in Alaska. It is expected that future development of road systems into Alaska's bush will open up many new opportunities for outdoor recreation, by making it easier to get to and from good sites. The majority of Alaska's bush is not now available for outdoor recreational use by large numbers of people, and improved access would greatly increase its utilization. In addition, continuing improvements in transportation equipment (for example, V/STOL aircraft, hovercraft, boats, snowmobiles and four-wheel-drive vehicles) will affect the mobility of participants and are expected to increase the per capita participation rates substantially as Alaskan residents make increasing use of these vehicles.

One additional facet that could be expected to lead to substantially increased resident per capita participation in some outdoor recreation activities is improvement in the number, location and quality of areas and facilities. It is very likely, for example, that the addition of a golf course would increase participation by satisfying latent or previously unmet demand. For planning purposes, however, as might be expected, it is nearly impossible to estimate whether these new areas and facilities will in fact be provided, and what their actual impact on participation might be if they were provided. Accordingly, the participation forecasts made in this plan generally avoid speculation on such changes, but the discussion of various activities in Section C includes an attempt to identify latent participation wherever sample data or interviews with recreation leaders have indicated its existence.

Population growth is the second major component of estimates of future resident demand, because of the importance of taking into account the sheer increase in the number of people available to participate in a given activity. All forecasts of the future size of the Alaskan population indicate significant future increases, but there are wide variations from one forecast to another because of certain underlying difficulties, including: (1) the small base for the population forecast; (2) the erratic growth patterns in the past; and (3) uncertainty regarding the rate of future development of Alaska's resources and their effect on the State's population. Some analysts have gone so far as to suggest that statistical forecasting of the State's population is impossible at this time.

During the preparation of this plan, 15 different forecasts of population for Alaska were reviewed. Seven of these were rejected because it was apparent that they overestimated both the present and the expected future levels of population. The remaining eight were analyzed in depth. Of these, the Bureau of the Census P-25 forecast appeared the most reasonable, and the II-B forecast was selected as being most appropriate; this forecast assumes a relatively high birth rate and small net immigration. While the forecasting technique is conservative, it has proved to be quite accurate in recent years. Working independently, the State Division of Planning and Research also chose the II-B forecast as the official State population forecast for comprehensive planning purposes.

To break the Statewide forecasts by the Bureau of the Census into regional population estimates, the consultants first collected statistics on present regional populations and then allocated the forecast Statewide totals on the basis of a technique suggested by Dr. George Rodgers in his paper, "Alaska - Regional Population And Employment," whereby population growth is allocated on the basis of expected changes in economic activity within the five regions.

The resulting population forecasts are shown below, together with the Bureau of the Census estimate of 1967 population:

	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	43,984	51,000	57,000	84,000
South Central	140,223	176,000	199,000	334,000
Southwestern	28,875	31,000	32,000	39,000
Interior	51,369	58,000	63,000	86,000
Northwestern	<u>13,455</u>	<u>15,000</u>	<u>16,000</u>	<u>22,000</u>
Total	277,906	331,000	367,000	565,000

It should be noted, however, that these population forecasts, and the resulting estimates of demand, include persons aged 12 years and under, while the sample data excluded this group. It was assumed that, in most activities (except outdoor games and sports), children are usually accompanied by a parent and thus their outdoor recreation habits in these activities are likely to be similar to those of their parents - particularly in skiing, picnicking, driving (riding) for pleasure, sightseeing, camping, hunting, boating, fishing, and flying (riding) for pleasure. However, in most outdoor games and sports and in some trail-related activities (motorcycling, or mountain climbing with gear), there may be dissimilarities in behavior.

Nonresidents. For nonresidents, projections of future participation in outdoor recreation in Alaska were based upon expected increases in both the number of tourists traveling to the State and the number of days they will devote to outdoor recreation. Projections of the number of tourists over the period from 1967 to 1975 were based upon estimates made by Cresap, McCormick and Paget in the report "A Program For Increasing The Contribution Of Tourism To The Alaskan Economy;" projections for the period 1975 to 2000 stem from the judgment of the Task Force. These estimates are shown in the following table:

	<u>Number Of Tourists Expected</u>
1967(Actual)	86,700
1975	185,500
1980	233,700
2000	600,600

Increases in average annual per capita participation were based upon anticipated national increases in vacation days per year (from a study by Arthur D. Little, Inc.), because longer vacations will very likely lead to greater average tourist participation in outdoor activities in Alaska as well as other states. These annual statistics were then converted to estimates of the average seasonal days and combined with resident statistics to estimate total peak day demands. A more detailed exploration of the non-resident forecasting techniques is presented in the separate volume of Appendixes.

B - CHARACTERISTICS OF PRESENT AND FUTURE OUTDOOR RECREATION DEMAND

This section presents Statewide and regional estimates of demand in Alaska for 14 major outdoor recreation activities and selected subactivities. Since these estimates are based upon survey data gathered through use of the questionnaire developed by the ORRRC and the BOR, definitions of the activities discussed in this section are the same as those used by those organizations (as detailed in the separate volume of Appendixes). Where the definition of an activity may be unclear, however, one is provided.

In general, this section presents a picture of demand for outdoor recreation in the State at the time of the survey in 1967, and as forecast for the years 1975, 1980 and 2000. A discussion of demand in relation to present and future supply of facilities is the subject of Chapter VI.

Both Statewide and regional estimates of resident demand for each activity are presented, together with comments on socioeconomic characteristics of the participants and on particular regional characteristics of demand. These estimates are composed of three sets of statistics: (1) the proportion of the resident population participating in the activity; (2) the average annual participation days per capita; and (3) the number of residents engaging in the activity in each region on a peak seasonal day for the years 1967, 1975, 1980 and 2000 (Statewide estimates are not given because peak seasonal days may vary from region to region).

As mentioned previously, no peak seasonal day estimates are given for major activities with both summer and winter season subactivities, because no one peak day is representative of both seasons. Moreover, peak seasonal day demand for subactivities is shown for 1967 only.

Estimates of nonresident demand for major activities and subactivities are shown wherever the data collected were statistically significant for estimation purposes. These estimates consist of the numbers of nonresidents engaging in an activity on an average seasonal day for the years 1967, 1975, 1980 and 2000.

The 14 major outdoor recreation activities are discussed in this section in the following order:

- Trail-related activities
- Sightseeing

- Driving for pleasure
- Picnicking
- Fishing
- Boating
- Camping
- Swimming
- Hunting
- Outdoor games and sports
- Ice skating
- Snow play
- Flying for pleasure
- Alpine skiing.

TRAIL-RELATED
ACTIVITIES

Trail-related activities constitute the most popular outdoor recreation pastime in Alaska. The 12 subactivities comprising this major activity are listed below in the order of their popularity (and the order in which they are discussed):

Walking for pleasure
 Nature study
 Bicycling
 Hiking
 Snowmobiling
 Motorcycling
 Snowshoeing
 Canoeing
 Horseback riding
 Dogsledding
 Cross-country skiing
 Mountain climbing with gear.

Total peak seasonal day estimates are not presented for the sum of the individual trail-related activities because of the mix of summer and winter season subactivities (as explained earlier). Also, estimates of nonresident demand are shown for only one subactivity (walking for pleasure), because the volume of nonresident participation in the other subactivities was expected to be too small to justify the cost of data collection.

Overall resident participation in all trail-related activities is summarized in the following table:

<u>Region</u>	<u>Resident Participation</u>	
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>
Southeastern	88%	80.9
South Central	85	46.6
Southwestern	95	111.2
Interior	85	42.0
Northwestern	90	89.3
Statewide	87%	67.0

On a Statewide basis, 87 per cent of the population participated in trail-related activities at some time during 1967. However, the number of days individuals participated annually on a per capita basis varied considerably throughout the State's regions, from slightly over 40 days for the residents of the more urban Interior and South Central Regions to 111 days for those in the sparsely populated bush of the Southwestern Region. The proximity of bush residents to the outdoors appears to be a substantial influence on their markedly higher participation in this activity.

Separate discussion of each of the component trail-related activities is presented below.

Walking For Pleasure

Walking for pleasure is the most popular trail-related activity of Alaska residents, with 72 per cent of all Alaskans participating in this activity throughout the State, twice the rate of participation in the second most popular trail-related activity (nature study). However, the frequency of participation varies considerably by sex, race, and region. For example, women, with 42 participation days per year are considerably more active than men, with 28 days. Bush residents participate in larger proportion (76 per cent) and with greater frequency (50 participation days annually) than urban residents (71 per cent

and 46 participation days, respectively). On the other hand, participation does not vary significantly according to education, income or occupation. Participation on a per capita basis by region is summarized below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	77%	43.2	19,000
South Central	67	19.2	27,000
Southwestern	77	49.9	14,400
Interior	70	20.0	10,300
Northwestern	77	42.1	5,700
Statewide	72%	27.5	

The greater participation on a per capita basis in Southeastern, Southwestern and Northwestern Alaska is probably attributable to the ease of participation in these areas. This assumption is substantiated by the fact that 80 per cent of the demand was reported as occurring within a few miles of the participants' homes. In general, the smaller size of the bush communities, the low cost of participation and the shortage of alternative forms of recreation in these regions probably make this activity relatively more popular than other activities.

Nonresident participation accounts for approximately 2,000 participants on an average seasonal day. As the following table shows, most of this is concentrated in the Southeastern, South Central and Interior Regions:

<u>Region</u>	<u>Nonresident Participation On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	300	800	1,100	3,500
South Central	1,000	2,200	3,000	9,500
Southwestern	100	100	200	600
Interior	500	1,100	1,500	4,900
Northwestern	100	200	300	1,000
Statewide	2,000	4,400	6,100	19,500

While the 1967 total may at first glance appear low in the light of the estimated 87,000 tourist visits during that season, it should be noted that a large percentage of the nonresident visitors is in the older age brackets, and that many of these visitors come in organized tour groups with limited opportunity of walking for pleasure.

Nature Study

Nature study is the second most popular trail-related recreation activity in the State, with 35 per cent of all Alaskans participating and an average annual participation per capita of more than 8 days:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	50%	21.5	11,800
South Central	32	5.7	9,900
Southwestern	34	10.3	3,700
Interior	30	5.3	3,400
Northwestern	21	4.6	800
Statewide	35%	8.5	

As the table shows, however, the proportion of the population participating in the activity and the frequency of participation varied considerably by region. In Southeastern Alaska, 50 per cent of the population engaged in nature study during the year, with a frequency four times that of South Central, Interior, or Northwestern Alaska. One reason might be the relatively easier access to nature areas via the extensive inland waterways and U. S. Forest Service trails. In addition, the heavy rainfall found in Southeastern Alaska is more conducive to the growth of a wide variety of flora and fauna, and thus may have stimulated greater interest in nature study.

Socioeconomic characteristics of demand for this activity include the following: women participate in this activity more often than men (39 per cent versus 31 per cent); urban participants predominate roughly two to one over rural participants, with the frequency of participation showing approximately the same ratio; and nature study participation appears to have a correlation with education, in that, for example, about half of the Alaskans with 16 or more years of education participate in nature study, compared with only 5 per cent of the group with four or less years of education.

Bicycling

Bicycling is the third most popular trail-related activity, with an average of 24 per cent of the population participating, as shown in the table below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	23%	7.4	4,100
South Central	20	6.9	12,000
Southwestern	28	6.7	2,400
Interior	30	7.4	4,800
Northwestern	27	7.9	1,300
Statewide	24%	7.1	

Throughout the State, participation is fairly uniform, ranging from 20 per cent of the population in South Central Alaska to 30 per cent in the Interior Region. Frequency of participation is also relatively stable, with average annual participation per capita running approximately seven or eight days in all regions. These figures, however, may be slightly lower than actual participation, because the survey did not include children under 12.

Participation in bicycling declines with age, with 64 per cent in the 12 to 17 age group reporting high rates of participation, while only 4 per cent of the 45 to 64 age group participate, for approximately one day per year. A slightly higher proportion of women than men participate, although the average days bicycled per year per participant is higher for men (41 versus 23). Participation does not vary greatly with income, but does increase markedly with household size: 10 per cent of the families of size one to two participate for three days per year, while 46 per cent of the families of size 10 or more participate for 12 days per year. Neighborhood participation accounts for 93 per cent of all bicycling.

Hiking

Hiking is a popular Alaskan summertime activity. Approximately 31 per cent of all Alaskans engage in this activity, and recent publications on interesting hikes in the State, such as "Thirty Hikes In Alaska," have spurred interest in hiking. The variation in participation among regions is shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	43%	3.5	3,800
South Central	34	3.0	10,400
Southwestern	28	2.3	1,600
Interior	20	1.9	2,400
Northwestern	10	1.2	400
Statewide	31%	2.7	

Residents of Southeastern Alaska participated in this activity to a significantly greater extent than those of the Northwestern Region. This may be partially due to the abundance of Forest Service trails adjacent to many Southeastern cities, and the greater mobility afforded Southeastern residents by inland waterways. Residents of Northwestern Alaska, on the other hand, are limited in their hiking opportunities by the prevalence of muskeg terrain and the shorter summer season in that region.

Socioeconomic characteristics of resident hiking enthusiasts are as follows: male per capita participation was about four times that for females; participants in the age group 10 to 17 hiked eight times as often as those over the age of 65; and students, professional and managerial employees, and military personnel all participated to greater extents than the Statewide average (42 per cent, 38 per cent and 52 per cent, respectively). Moreover, the majority of the residents surveyed indicated that more facilities such as marked trails would enhance participation.

Snowmobiling

Snowmobiling is a relatively new outdoor recreation activity in Alaska. It is particularly popular in the Southwestern and Northwestern Regions, as shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	3%	0.1	100
South Central	15	1.9	2,700
Southwestern	52	18.5	5,600
Interior	17	1.8	1,000
Northwestern	53	25.9	3,600
Statewide	22%	4.5	

In these regions, approximately half the population goes snowmobiling at some time during the year, generating from 19 to 26 participation days per capita. The high levels of participation in these areas may be the result of greater dependency by bush residents on the snowmobile in winter as a basic means of transportation as well as recreation. In addition, the snowmobile has been increasingly substituted for the dogsled by many of the inhabitants of these regions. Finally, nearly all participation in this activity occurs within a few miles of the participant's home.

While the participation figures may appear high in relation to the 4,060 snowmobiles registered in 1969, snowmobiling appears to be a family activity; participation increases dramatically for the larger households, thereby affording more utilization per vehicle. Furthermore, male participation is higher than female participation on a per capita basis, with men generating three times as many participation days in a year as women.

Motorcycling

Over the course of the year, an estimated 10 per cent of the State's residents participate in motorcycling - a rate which seems high when compared with the estimated 5,600 motorcycles registered in 1968. As shown in the following table, 10 per cent of the State's residents participated in motorcycling in 1967, with average annual participation per capita of 3.5 days:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	10%	2.3	1,300
South Central	8	3.6	6,200
Southwestern	17	8.9	3,300
Interior	10	1.6	1,000
Northwestern	10	2.4	400
Statewide	10%	3.5	

All regions except Southwestern Alaska have approximately the same proportion of the population participating, with average annual participation per capita also within a narrow range. In Southwestern Alaska, on the other hand, nearly twice as many residents participate, with a frequency two-and-one-half times that of the balance of the State. One reason for this deviation might be the heavier utilization of these vehicles during the fishing season in such larger communities as Naknek, King Salmon, Dillingham and Bethel.

Student participation in this activity is very high in Alaska (15 days annually, versus the overall average of 3.5). As might be expected, the proportion of the population participating decreases significantly with age (40 per cent in the 12 to 17 age group, versus less than 3 per cent for those over the age of 45). Participation tends to increase with household size and, surprisingly, almost equal proportions of males (24 per cent) and females (19 per cent) participate in this activity, although men participate twice as often as women (45 days per year versus 23 days). Motorcycling is largely a neighborhood activity.

Snowshoeing

It is estimated that approximately 9 per cent of the State's population participated in snowshoeing in 1967, with per capita participation slightly more than one day per year, as shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	3%	0.2	100
South Central	8	1.5	3,300
Southwestern	21	2.9	1,300
Interior	10	0.9	700
Northwestern	9	1.5	300
Statewide	9%	1.3	

On a peak seasonal day, the largest group of snowshoeing Alaskans is residents of the more populous South Central Region.

Canoeing

Canoeing is becoming an increasingly popular sport in Alaska. Agencies and groups such as the Bureau of Land Management and Alaska's Pioneer Canoers Association encourage participation in this activity by providing maps and information on "canoe trails" and connecting waterways ideal for canoeing. For example, a detailed map of the canoe trails found on the Kenai Peninsula, complete with information about the routes and campgrounds, is printed by the Pioneer Canoers Association, and the Bureau of Land Management has prepared and distributes a guide to 12 highway-accessible canoe trails around the State. On a peak seasonal day, the largest number of canoers participate in South Central Alaska, as shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	7%	0.6	700
South Central	8	0.7	2,300
Southwestern	7	0.8	600
Interior	20	1.2	1,600
Northwestern	2	0.4	100
Statewide	8%	0.8	

Residents of the Interior Region participate quite heavily in this activity, with 20 per cent of the population canoeing during the year. Significant socio-economic characteristics of participants include greater per capita participation by men than by women (one participation day versus one-half participation day), and a decrease with age in the proportion of the population participating, from about 17 per cent for those in the 12 to 17 age group to 2 per cent for those 65 and older. As might be expected, a significant portion of demand for this activity occurs on vacations, trips and outings.

Horseback Riding

An estimated 8 per cent of Alaskan residents ride horses during the year. Nearly all of the participation is concentrated in South Central and Interior Alaska, the former region accounting for approximately 80 per cent of the participation days, and the latter accounting for most of the remaining 20 per cent, as shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	7%	0.2	200
South Central	11	1.1	3,900
Southwestern	4	0.1	100
Interior	9	0.7	800
Northwestern	1	0.1	
Statewide	8%	0.7	

A reason for this urban concentration of participation could well be the high cost of maintaining a horse (food and shelter, etc.) over the winter in Alaska, and difficulty in transporting a horse to and from other regions.

The survey also indicated that approximately 2 per cent of the State's population would like to participate in this activity if facilities or equipment were available.

Dogsledding

Dogsledding is an activity engaged in primarily by residents of the Alaskan bush, but it also enjoys considerable popularity with a small portion of the State's urban residents, as is shown in the table below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	1%	0.03	
South Central	3	0.53	800
Southwestern	23	5.16	1,600
Interior	2	0.11	100
Northwestern	8	1.52	200
Statewide	6%	0.90	

On a Statewide basis, 6 per cent of the Alaskan population participates in dogsledding activities with much higher proportions of participation coming from residents in the bush regions of Southwestern and Northwestern Alaska. Despite the obvious association of dogsledding with bush communities, however, the second highest level of peak seasonal day demand comes from the South Central Region, indicating that some members of this more populous region have acquired the specialized skills needed in this activity, as the result of a developed racing program.

A high proportion (17 per cent) of the 12 to 17 age group participates, with lower and fairly consistent proportions participating throughout the balance of the age group classifications. As would be expected, a higher proportion of men participate than women (8 per cent versus 5 per cent), and with much greater frequency (24 days per year versus 6 days).

Cross-Country Skiing

Cross-country skiing is an outdoor recreation activity for approximately 5 per cent of the total Alaskan population. However, this percentage varies significantly by region:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	3%	0.3	200
South Central	6	0.6	1,300
Southwestern	10	0.8	400
Interior	2	0.1	100
Northwestern	17	1.8	400
Statewide	5%	0.5	

On a peak seasonal day, the highest level of demand for cross-country skiing comes from residents in the South Central Region, partially because of the cross-country skiing program in Anchorage schools. Low participation in Southeastern Alaska may be attributed to difficulties of terrain and poor snow conditions in many areas. In Interior Alaska, the low participation is due to the severe cold at the height of winter, although cross-country ski programs have been developing rapidly over the past few years.

Mountain Climbing With Gear

Comparatively few Alaskans go in for mountain climbing with gear, as shown by the following table:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	5%	0.36	400
South Central	3	0.19	700
Southwestern	1	0.04	
Interior	3	0.05	100
Northwestern	-	-	
Statewide	3%	0.17	

On a Statewide basis, approximately 3 per cent of the population engages in this activity, generating only a fraction of one day's participation annually on a per capita basis. On a peak seasonal day, the majority of participation in mountain climbing occurs in Southeastern and South Central Alaska. The generally low level of participation is probably due to the highly specialized knowledge required, and the associated risk. Male participation is far greater than female (41 per cent versus 9 per cent) and those in the 18 to 24 age bracket participate in a proportion twice that of the Statewide average.

SIGHTSEEING

Alaska's outstanding scenery is the principal reason why sightseeing is the State's second most popular major outdoor recreation activity. As shown in Exhibit V-5, following, 73 per cent of the State's population participated in sightseeing in 1967, with an average annual participation per capita of nearly 21 days. Participation varies considerably among the regions, however, from a low of 59 per cent of the population participating (for an average of 23 participation days annually) in Northwestern Alaska, to a high of 81 per cent (and nearly 36 participation days) in Southeastern Alaska. An important cause of this wide variation is the difference in mobility: there are no roads to, and few within, Northwestern Alaska, and only limited water transportation, whereas residents of Southeastern Alaska may travel throughout the region on the Alaska ferry system or their own boats, as well as the roads in this region.

Per capita participation in sightseeing seems to be about the same for all age groups of residents (except for those in the 12 to 17 age bracket, whose participation is approximately 25 per cent less than the Statewide average). Per capita participation declines with the size of resident households, with those in families of one to two members participating for approximately 27 days per year, and those in families of more than 10 members participating for 13 days per year.

For nonresidents, sightseeing appears to be the most popular of all outdoor recreation activities, with 9,200 nonresident participation days generated on an average seasonal day, as shown in the table below:

<u>Region</u>	<u>Nonresident Participation</u> <u>On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	1,700	4,000	5,300	17,100
South Central	4,400	9,800	13,200	42,200
Southwestern	300	600	800	2,700
Interior	2,500	5,600	7,600	24,300
Northwestern	300	800	1,100	3,600
Statewide	9,200	20,800	28,000	89,900

SIGHTSEEING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	81%	35.6	15,700	20,400	24,100	44,100
South Central	75	19.5	27,300	38,500	45,700	96,200
Southwestern	68	22.3	6,400	7,700	8,400	12,800
Interior	74	10.6	5,400	6,800	7,800	13,300
Northwestern	59	23.0	3,100	3,900	4,400	7,500
Statewide	73%	20.9				

The relatively high level of demand for this activity by nonresidents indicates the importance of Alaska's scenic beauty as an economic resource.

DRIVING FOR PLEASURE

Driving (or riding) for pleasure, an activity which includes both drivers and passengers, is also very popular in the State, with nearly three-fourths of the State's residents indicating they participated in 1967, as shown in Exhibit V-6.

However, participation varies considerably by region, with residents of Southwestern and Northwestern Alaska participating in significantly smaller proportions than those of the other regions. These two regions are primarily bush areas, with few communities that have any extensive road systems or large numbers of vehicles.

Participation is highest in South Central Alaska, where nearly 70 per cent of the State's registered vehicles are located, and where, on a peak seasonal day, an estimated 45,400 residents drive for pleasure. Southeastern Alaska also generates a fairly high level of demand, with 21,100 residents participating in this activity on a peak seasonal day and 82 per cent of the population participating for an average of 35.5 days annually per capita, reflecting a relatively high utilization of the miles of roads found in Southeastern Alaska.

Participation per capita does not appear to vary considerably among different age groups with the exception of the 18 to 24 age group, which has an average participation per capita 50 per cent higher than the State as a whole. The number of annual participation days is about the same for both men and women. However, participation increases considerably as the level of education rises, from 47 per cent for those with up to four years of education to 82 per cent for those with 16 years or more. Participation also increases with income, as evidenced by the 50 per cent participation for those in the \$15,000 to \$20,000 range, but does not significantly vary with household size except for families larger than 10 people where the rate drops from the State-wide average of 73 per cent to 54 per cent.

The high overall rate of participation by residents is partly explained by its close relationship to such activities as sightseeing and picnicking, particularly in the spring of the year when residents are said to have "cabin fever" and take to the outdoors in great numbers.

DRIVING FOR PLEASURE
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	Percentage Of Total Population Participating	Average Annual Participation Days Per Capita	Participation On A Peak Seasonal Day			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	82%	35.5	21,100	26,900	31,800	51,300
South Central	77	24.0	45,400	62,900	74,800	138,300
Southwestern	57	23.8	9,300	10,900	12,000	16,100
Interior	73	14.7	10,200	12,700	14,600	21,800
Northwestern	58	13.4	2,400	2,900	3,300	5,000
Statewide	73%	23.6				

Driving for pleasure is a significant recreation activity for nonresidents also, with the highest levels of participation occurring in South Central and Interior Alaska, as shown below:

<u>Region</u>	<u>Nonresident Participation On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	400	800	1,100	3,500
South Central	2,100	4,700	6,400	20,400
Southwestern		100	100	300
Interior	1,000	2,400	3,200	10,200
Northwestern	<u>100</u>	<u>200</u>	<u>200</u>	<u>700</u>
Statewide	3,600	8,200	11,000	35,100

PICNICKING

Picnicking is the fourth most popular of the major outdoor recreation activities, largely because many Alaskan residents eat out-of-doors, away from home (which is the definition of a picnic used here) while participating in other outdoor activities.

However, participation varies considerably on a regional basis, with Southwestern and Northwestern Alaska having average annual participation rates per capita lower than those in the balance of the State, as shown in Exhibit V-7. Possible reasons for this deviation include the shortage of facilities in these two regions, and the difficulty of getting to pleasant areas to picnic. Moreover, in Southwestern Alaska, the mosquitos often make outdoor picnicking impossible during the summer months, and Northwestern Alaska's harsh weather is often a barrier to all outdoor activity. Southeastern Alaska, on the other hand, shows a significantly higher proportion of participation in picnicking (88 per cent of the population), perhaps partly because of the popularity of boating in this region.

The rate of participation per capita is approximately the same for all age groups except those over the age of 65, whose participation declines significantly. Per capita female participation is nearly 40 per cent higher than that of males.

Nearly one-third of the respondents indicated that they were not satisfied with the facilities currently available for picnicking. An earlier survey of State campground users indicated that picnic areas could be improved by the provision of water at each site, a general cleanup of the entire area, improved toilet facilities, and more firewood. Participants also appeared to desire the construction of more picnicking areas with adjacent hiking paths, and access to other activities, such as fishing. There was also an indication that residents would like to have more facilities available for group games and sports. This matter is discussed further in Chapter VI.

PICNICKING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	88%	16.1	13,300	16,400	19,400	31,300
South Central	79	11.7	30,900	41,300	49,100	91,200
Southwestern	79	7.5	4,100	4,600	5,100	6,900
Interior	84	11.4	11,000	13,200	15,200	22,800
Northwestern	66	8.5	2,400	2,800	3,200	4,900
Statewide	80%	11.8				

Nonresident participation in picnicking is fairly low, with an estimated 2,000 persons enjoying this activity on an average seasonal day, as shown in the table below:

<u>Region</u>	<u>Nonresident Participation On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	400	900	1,300	4,100
South Central	900	2,000	2,600	8,400
Southwestern		100	100	300
Interior	700	1,500	2,000	6,400
Northwestern		100	100	300
Statewide	2,000	4,600	6,100	19,500

Virtually all participation in this activity by nonresidents occurred in the three regions served by paved roads or waterways.

FISHING

Fishing in Alaska offers outstanding opportunity for outdoor recreational enjoyment, and it was estimated in 1963 that Alaskan anglers spent nearly \$10 million in pursuit of good fishing. As shown in the table below, the highest level of participation is found in Southwestern Alaska, where 78 per cent of the population participates at some time during the year for an average of 18 participation days annually per capita:

<u>Region</u>	<u>Resident Participation</u>	
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>
Southeastern	67%	13.4
South Central	63	10.8
Southwestern	78	18.1
Interior	52	6.0
Northwestern	58	10.0
Statewide	64%	10.1

The Southwestern Region is the center of the State's commercial salmon fishing industry, and parts of this region offer the most outstanding freshwater fishing in the world, with an abundance of rainbow trout, Dolly Varden, Arctic char, steelhead, and lake trout.

The generally higher level of activity found in both Southeastern and Southwestern Alaska is supported to some extent by an old (1961) study by the Alaska Department of Fish and Game, which indicated that residents of Southwestern Alaska caught more fish per fisherman than any other region, and that residents of Southeastern Alaska caught a larger number of sport fish than the residents of any other region. The increasing popularity of this activity is suggested by the growing number of sport fishing licenses issued: in 1967, 50,000 residents and 27,000 nonresidents purchased sport fishing licenses, up from 42,000 and 15,000, respectively, in 1962.

On an average seasonal day, an estimated 1,100 nonresidents fish for sport as the table below shows:

<u>Region</u>	<u>Nonresident Participation On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	200	600	700	2,200
South Central	700	1,700	2,300	7,300
Southwestern		100	200	500
Interior	200	500	700	2,200
Northwestern				
Statewide	1,100	2,900	3,900	12,200

The major portion of this average seasonal demand by nonresidents is generated in the South Central Region, where access to fishing grounds is primarily by car. The lack of nonresident participation in Southwestern and Northwestern Alaska is probably attributable to the difficulty of access to good fishing grounds in those regions and the lack of opportunities for members of tour groups to go fishing.

Freshwater fishing, saltwater fishing, and ice fishing are discussed separately below.

Freshwater Fishing

Freshwater fishing accounts for about two-thirds of all fishing participation. As shown in the table below, the highest levels of participation in this activity occur in Southwestern and South Central Alaska, where the proportions of the population participating and also the frequency of participation are above the Statewide average:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	40%	3.9	2,700
South Central	57	7.7	16,800
Southwestern	66	11.7	5,300
Interior	49	5.3	4,200
Northwestern	37	4.7	1,000
Statewide	51%	6.9	

Per capita participation is approximately constant for all age groups (except for a significant decline in the rate for those 65 and older), and male participation per capita is two-and-one-half times the rate for female participation. The per capita rate for those with less than four years of education is twice that for the State as a whole.

Responses to survey questions regarding latent demand and satisfaction with existing facilities are of considerable interest. While the respondents appeared generally satisfied with present freshwater fishing areas and facilities, they expressed dissatisfaction about crowding. However, the major reasons given for nonparticipation among those who would like to enjoy freshwater fishing are not related to inadequacy of areas and facilities; instead, they have to do with personal circumstances, such as insufficient leisure time or lack of personal equipment.

Saltwater Fishing

Saltwater fishing accounts for most of the remaining one-third of total fishing recreation in the State. As shown in the following table, the Southeastern and South Central Regions have the highest absolute numbers of participants in saltwater fishing on a peak seasonal day:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	56%	9.4	6,400
South Central	23	2.5	5,500
Southwestern	15	1.7	800
Interior	11	0.6	500
Northwestern	18	1.8	400
Statewide	27%	3.1	

Furthermore, in Southeastern Alaska, the proportion of the population participating in this activity is twice the Statewide average, and average annual participation days per capita are three times the Statewide average. This high level of activity is undoubtedly due to the outstanding salmon fishing opportunities in this region. In addition, the growing popularity of salmon derbies throughout the State has increased interest in this activity.

Ice Fishing

As shown in the table below, ice fishing represents a small but significant part of the total fishing for recreation in Alaska:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	2%	0.1	100
South Central	10	0.6	1,300
Southwestern	48	4.7	2,100
Interior	4	0.1	100
Northwestern	29	3.5	700
Statewide	15%	1.0	

While only 15 per cent of the Statewide population participates in ice fishing, Southwestern and Northwestern Alaska have the high rates of 48 per cent and 29 per cent, respectively, with participation days per capita of 4.7 and 3.5 annually. The vast majority (88 per cent) of ice fishing activity occurs as neighborhood participation.

BOATING

Resident participation in boating is frequently tied to other types of outdoor recreation, such as fishing, picnicking and sightseeing. Boating activity may be divided into three categories: motorboating, sailing, and airboating. Of these three, however, only motorboating shows sufficient participation at this time to provide reliable statistics for estimating and forecasting purposes. It is nonetheless important that sailing is becoming increasingly popular in Southeastern and South Central Alaska, and thus may soon become a significant form of recreation in Alaska.

As shown in Exhibit V-8, an estimated 54 per cent of the total Alaskan population engaged in motorboating in 1967, with an average annual participation per capita of 8 days. As might be expected, the Southeastern and Southwestern Regions had significantly higher proportions of the population participating in this activity and significantly higher frequency of participation, perhaps in part because of the high volume of fishing activity in these regions and the correspondingly large number of boats. In addition, in the more remote areas of Alaska, boating is a primary means of summertime transportation, as opposed to the predominance of motorized land vehicles elsewhere in the State. Furthermore, the low levels of participation in Interior Alaska are undoubtedly due to the frozen state of the waterways during a major portion of the year.

The popularity of boating is also rising, as indicated by the increase, from 2,729 in 1960 to 8,128 in 1968, of boats (operating in coastal waters) registered with the Coast Guard. Of the 1968 total, nearly half are located in Southeastern Alaska, further attesting to the popularity of boating in this region.

Per capita participation is essentially constant for all age groups except those over 65. Per capita male participation is nearly three times that for females. Finally, it is interesting to note that approximately 3 per cent of the respondents in the sample indicated a desire to participate in boating but were unable to do so, largely because of lacking the equipment or the time to pursue the activity.

Nonresident boating activity is quite low at present, with virtually all of the participation occurring in Southeastern and South Central Alaska. Present estimates and forecasts are shown in the following table:

<u>Region</u>	<u>Nonresident Participation</u> <u>On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	300	600	800	2,700
South Central	100	300	400	1,400
Southwestern		100	100	400
Interior				100
Northwestern				100
Statewide	400	1,000	1,300	4,700

MOTORBOATING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	59%	11.4	7,800	10,000	13,200	25,900
South Central	45	5.7	12,500	18,100	23,100	52,100
Southwestern	86	20.9	9,400	11,600	13,600	22,200
Interior	44	3.8	3,000	3,900	4,800	8,800
Northwestern	55	8.9	1,900	2,400	2,900	5,500
Statewide	54%	8.0				

CAMPING

Camping (in both developed and undeveloped areas) is a major summer recreational activity in Alaska, with resident participation estimated at nearly 43 per cent of the population on a Statewide basis, as shown in Exhibit V-9.

The highest levels of participation in camping are found in the warm Interior Region, the rural Southwestern Region, and South Central Alaska. The two types of camping are discussed separately below. Nonresidents camp largely in developed areas; therefore, their participation is discussed in connection with that subactivity.

Camping In Developed Areas

Over half of the camping in Alaska in 1967 took place in developed areas or established campgrounds, as is indicated by the following table:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	23%	1.5	1,700
South Central	32	3.0	10,500
Southwestern	17	2.7	2,000
Interior	36	2.4	3,100
Northwestern	17	2.2	800
Statewide	27%	2.6	

South Central and Interior Alaska, where pickup campers and trailers are used extensively, had higher proportions of the population participating. The Southwestern and Northwestern Regions had significantly lower participation rates because of the shortage of campground facilities in these areas. Furthermore, the lower participation rates for these two bush regions indicate that camping in developed areas is primarily an activity of urban residents. As might be expected, most camping took place on vacations.

Camping is also a fairly popular outdoor recreational activity for non-residents, but almost entirely in developed areas. On an average seasonal day, as shown below, it is estimated that 4,300 nonresidents engage in this activity, with virtually all the demand occurring in South Central and Interior Alaska:

CAMPING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	35%	3.2	3,600	4,700	6,100	12,700
South Central	44	5.3	18,600	26,400	34,000	82,400
Southwestern	48	6.0	4,500	5,500	6,500	11,300
Interior	51	4.1	5,300	6,800	8,400	16,400
Northwestern	34	5.8	2,000	2,600	3,500	6,100
Statewide	43%	4.9				

Region	Nonresident Participation On An Average Seasonal Day			
	1967	1975	1980	2000
Southeastern	500	1,100	1,400	4,500
South Central	2,400	5,500	6,600	23,800
Southwestern		100	100	400
Interior	1,400	3,200	4,200	13,600
Northwestern				100
Statewide	4,300	9,900	12,300	42,400

While this average seasonal daily participation by nonresidents may appear quite small compared with peak day resident demand, it should be noted that this participation is sustained fairly evenly throughout most of the week, without the weekend peaks found for residents. As a result, over the total camping season, participation is quite high, as was indicated by a five-month check by maintenance personnel of more than 50 campsites in Southeastern, South Central and Interior Alaska. This survey showed that 44 per cent of the nearly 17,000 vehicles observed carried out-of-State license plates. Even after allowing for military users who are not required to buy Alaska license plates, this total indicates that participation by nonresidents in developed area camping is still high.

The 1964 survey of campers conducted by Alaska's Department of Natural Resources (as noted earlier) also yielded some interesting information regarding the characteristics of resident and nonresident campground users. For example, most of these campers were young (75 per cent were less than 45 years old); nearly half of the resident users were military personnel; and 30 per cent of the nonresident users were retired. Among both residents and nonresidents, people in professional occupations accounted for almost 20 per cent. It was further estimated that 60 per cent of all resident campers in developed areas came from Anchorage or Fairbanks.

In addition to identifying certain characteristics of camping participants, the 1964 survey summarized campers' attitudes toward the facilities in Alaska. Both residents and nonresidents reported that they would like to have other recreational facilities located near campgrounds, such as hiking trails and, wherever possible, access to water-oriented activities. Many of the respondents stated that they did not camp more because of the lack of campground facilities, thus indicating a strong latent demand for this activity. This latent demand appears to be borne out by the 1967 recreation demand study, in which many residents and nonresidents attributed their nonparticipation to lack of facilities, while present campers give crowding as their major cause for dissatisfaction. Further discussion of this matter is presented in Chapter VI.

Camping In Undeveloped Areas

Camping in areas with no road access and where no facilities are provided comprises the balance of demand for camping activities by residents in the State. As shown in the following table, the highest participation rate for this activity occurs in Southwestern Alaska, where there are very few developed campground facilities:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	20%	1.7	1,900
South Central	24	2.3	8,100
Southwestern	38	3.4	2,500
Interior	24	1.7	2,200
Northwestern	19	3.6	1,200
Statewide	24%	2.3	

Participation levels for this activity are roughly the same as those for camping in developed areas, indicating the strong outdoor recreation orientation of many Alaskans and their desire to camp in a natural environment.

Camping in these undeveloped areas is predominantly a male activity, with men generating an average of four days of annual participation, compared with only one day for women. Participation in this activity also appears to vary with age, with those in the 25 to 44 age group having the highest participation per capita.

While it is partially true that camping in undeveloped areas represents latent demand for developed campgrounds, it is important to note that much of the enjoyment of this activity may stem directly from the undeveloped character of the campsite. As a result, it is possible that facilities developed for this group of campers would not be fully utilized.

SWIMMING

There are four types of swimming activity that Alaska residents participate in over the year: lake and stream swimming, pool swimming, ocean swimming, and scuba diving. In the case of scuba diving, however, survey data collected for this plan did not evidence sufficient participation at this time to permit statistically reliable estimates and forecasts of demand.

Because pool swimming may be regarded as a year-round activity, while other swimming activities involve summer participation only, no aggregate peak season estimates are shown. As the table below indicates, however, an estimated 43 per cent of the State's residents swim at one time or another during the course of a year, and the average annual participation per capita is 6.4 days:

<u>Region</u>	<u>Resident Participation</u>	
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>
Southeastern	48%	8.8
South Central	41	6.1
Southwestern	50	5.5
Interior	40	6.0
Northwestern	33	4.7
Statewide	43%	6.4

As would be expected, participation declines steadily with age, in terms of both percentage of population and average days per year. Statewide, men and women show the same levels of participation (42 per cent and 7.7 days for men, 43 per cent and 7.3 days for women).

While there appears to be no significant correlation between swimming and income, students as a group swim twice as many days per year as the average.

Nonresident participation in swimming was quite low in 1967, with less than 100 days of participation on an average seasonal day. Increases are forecast for future years, however, as shown below:

<u>Region</u>	<u>Nonresident Participation On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern		100	100	100
South Central		100	200	200
Southwestern				
Interior				
Northwestern				
Statewide	100(est.)	200	300	300

The three main subcategories of swimming are discussed separately below.

Lake And Stream Swimming

Lakes and streams represent the location of approximately 47 per cent of all swimming in Alaska. On a peak seasonal day, the highest level of demand is generated by residents in South Central Alaska, as shown in the table below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	21%	2.0	1,100
South Central	31	3.1	5,400
Southwestern	49	4.1	1,500
Interior	30	3.1	2,000
Northwestern	19	1.8	300
Statewide	29%	3.0	

The 12 to 17 age group is the most active in this activity, with an average of 8 days of participation per capita annually, compared with 3 for the State as a whole. Many respondents indicated they desired to participate in this activity more often but were constrained by difficulty of access to swimming areas.

Pool Swimming

As shown in the table below, approximately 12 per cent of the State's residents engage in pool swimming during the year, with average annual participation days per capita of 1.7:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	18%	2.6	2,300
South Central	13	1.9	1,900
Southwestern	4	0.7	300
Interior	12	1.3	1,000
Northwestern	6	0.6	400
Statewide	12%	1.7	

In this activity, the 18 to 24 age group is the most active, with an average annual participation per capita of 3 days. While respondents in general indicated little dissatisfaction with the availability of facilities, significantly lower participation rates and percentages of participation in Southwestern and Northwestern Alaska reflect the significant lack of facilities in these regions. In addition, the use of inflatable backyard pools, popular in the urban areas of the State, probably contributes to the participation rates in Southeastern, South Central and Interior Alaska. Furthermore, some of the participation recorded may have taken place outside the State, since 51 per cent of the demand for this activity was reported as occurring on vacations.

Ocean Swimming

While the Alaskan environment is not especially conducive to ocean swimming, it appears that 15 per cent of the total population participates in this activity, with an average annual participation per capita of approximately 2 days:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	34	4.2	1,400
South Central	9	1.1	3,300
Southwestern	6	0.7	300
Interior	8	1.6	800
Northwestern	15	2.3	100
Statewide	15%	1.7	

As with lake and stream swimming, there is significant variation by region. For example, Southeastern Alaska has a much higher proportion of the population swimming in the ocean than other areas in the State, because its larger communities are near the ocean and because its beaches are conducive to outings.

It is quite interesting that 8 per cent of the sample respondents in the Interior Region and 15 per cent of those in Northwestern Alaska indicated some ocean swimming. For residents of Interior Alaska, this participation must have occurred on trips to other regions, since this region is landlocked. In Northwestern Alaska, on the other hand, swimming in Norton Sound and Kotzebue Sound must explain at least a major part of this participation, since the economic circumstances of most residents result in low levels of mobility. At the same time, the fact that 35 per cent of the demand for this activity occurred on vacations may partially explain the surprisingly high rates found in these regions.

HUNTING

Hunting is an increasingly popular sport in Alaska, with nearly 40,000 hunting licenses issued to residents in 1967. Wildlife populations are not uniformly abundant throughout the State, but many areas contain such large quantities that there are few (if any) hunting restrictions. For example, the huge caribou herds of Northwestern Alaska are estimated at over 500,000 and the yearly harvest at 30,000, many of which are taken by bush residents for subsistence. In addition to the abundance of game animals, the wide variety of big game, small game and waterfowl makes hunting a popular activity in Alaska.

As shown in Exhibit V-10, hunting is of interest to more of the population in Southwestern Alaska and the Interior Region, because the game populations are large relative to the number of residents and hunting has more to do with subsistence than recreation. On a Statewide basis, approximately 40 per cent of the population engages in hunting during the year, with an average annual participation per capita of slightly more than 6 days.

Nonresident participation in hunting is fairly low at present, as shown by the following table:

<u>Region</u>	<u>Nonresident Participation</u> <u>On An Average Seasonal Day</u>			
	<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	100	200	300	900
South Central	600	1,300	1,800	5,700
Southwestern				
Interior	100	200	300	900
Northwestern	—	—	—	—
Statewide	800	1,700	2,400	7,500

However, participation by this group is increasing substantially, as evidenced by the more than doubling of the number of nonresident hunting licenses issued between 1962 and 1967.

The three subcategories of hunting are discussed separately below.

Big Game Hunting

Approximately 30 per cent of the State's total population hunts big game at some time during the year, as shown by the table below:

HUNTING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	36%	4.6	2,500	3,100	3,600	5,700
South Central	38	5.8	10,200	13,900	16,200	29,100
Southwestern	54	13.3	4,800	5,600	6,000	7,800
Interior	41	4.9	3,200	3,900	4,400	6,400
Northwestern	38	10.0	1,700	2,000	2,300	3,300
Statewide	40%	6.4				

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	30%	2.8	1,500
South Central	30	2.9	5,100
Southwestern	35	3.5	1,300
Interior	34	2.7	1,700
Northwestern	21	4.1	700
Statewide	30%	3.0	

As would be expected, big game hunting is predominantly a male activity. Participation tends to decline with both increasing age and increasing size of household.

Small Game Hunting

Some of the animals hunted as small game are wolf, coyote, fox, wolverine, lynx, muskrat, beaver, and upland birds. On a peak seasonal day, the highest level of demand comes from residents in South Central and Southwestern Alaska, as shown below:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	10%	0.9	500
South Central	21	2.0	3,500
Southwestern	44	6.4	2,300
Interior	22	1.8	1,200
Northwestern	23	3.9	700
Statewide	22%	2.3	

The proportion of the population hunting small game varies considerably from one region to another, with the highest level found in the sparsely populated but game-rich Southwestern Region.

Waterfowl Hunting

The hunting of ducks and geese in Alaska is also a popular activity, particularly in the bush regions where these animals are found in abundance. For

example, as shown below, in Southwestern Alaska, where there are vast waterfowl nesting grounds, the proportion of the population participating in this activity is three times the State average, as is also the frequency of participation:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	12%	0.9	500
South Central	10	0.9	1,600
Southwestern	40	3.4	1,200
Interior	13	0.4	300
Northwestern	19	2.0	300
Statewide	15%	1.1	

On a peak seasonal day, the largest numbers of waterfowl hunters are found in the South Central and Southwestern Regions. However, the high level of demand in South Central Alaska is constrained by the difficulty of access to good waterfowl hunting areas.

Few women participate in this activity, and participation is approximately the same for all age groups.

OUTDOOR GAMES AND SPORTS

Outdoor games and sports include a variety of individual activities such as golf, tennis, baseball, football, soccer, handball, and so forth. As shown in Exhibit V-11, it is estimated that 31 per cent of Alaska's total population plays outdoor games and sports at some time during the year. This participation does not vary greatly by region; however, somewhat lower percentages and average annual participation days per capita for Southwestern and Northwestern Alaska may reflect the mode of life of these residents and the shortage of facilities in those areas. (Nonresident participation in this activity, and in the remaining activities reviewed in this section, was too low to provide average seasonal day estimates.)

Approximately 5 per cent of the population participates in golf, and 6 per cent in tennis.

OUTDOOR GAMES AND SPORTS
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	36%	7.9	4,400	5,900	7,000	13,600
South Central	31	6.0	10,700	15,000	18,500	41,500
Southwestern	25	4.0	1,500	1,800	2,100	3,300
Interior	34	6.1	3,900	4,600	5,900	10,600
Northwestern	26	3.6	600	800	900	1,600
Statewide	31%	6.0				

Golf

Golfing activity in the State is severely constrained by the lack of facilities. Only three courses (36 holes) are located in Alaska, two of which are on military reservations; another course is opening for the first time in Anchorage this summer.

Respondents indicated surprisingly high rates of participation (comparatively speaking) in South Central and Interior Alaska:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	7%	0.45	200
South Central	5	0.78	1,400
Southwestern	1	0.04	
Interior	6	1.17	800
Northwestern	2	0.06	
Statewide	5%	0.71	

Residents of the other three regions also indicated some participation, but this golfing occurs either in improvised settings or on trips outside the regions. Except for the famous "million dollar" no-grass course in Southeastern Alaska, there are no formal facilities in any of these three regions. The demand statistics shown for these regions are partially explained by the fact that more than one-fourth of the total demand occurred on vacations.

As would be expected, higher rates of participation were recorded by men (an average of 0.8 days annually) than by women. Overall, respondents indicated little dissatisfaction with the quality of present facilities, but a significant number did report that they would like to golf if additional facilities were available.

Tennis

Approximately 6 per cent of the State's residents play tennis during the year, as shown in the following table:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	7%	1.0	600
South Central	7	0.8	1,400
Southwestern	4	0.4	200
Interior	5	0.5	300
Northwestern	1	0.1	
Statewide	6%	0.7	

More than half of this activity occurred in South Central Alaska, with the Interior and Southeastern Regions together generating another 36 per cent of the demand.

Participation declines with age, those in the 12 to 24 age group being the most active. The survey indicated little dissatisfaction with the quality of present facilities, but there was a strong indication of latent demand for this activity (respondents cited lack of facilities as the most significant factor in reducing their participation).

Other Outdoor Games And Sports

This subcategory is an aggregation of many games or sports in which residents participate over the year; examples are baseball, volleyball, handball and soccer. As shown in the table below, the percentage of the population participating is fairly constant throughout the State, with somewhat lower rates in Southwestern and Northwestern Alaska and a noticeably higher rate in Southeastern Alaska:

<u>Region</u>	<u>Resident Participation</u>		
	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>
Southeastern	30%	6.5	3,600
South Central	24	4.5	7,900
Southwestern	23	3.7	1,300
Interior	27	4.4	2,800
Northwestern	23	3.4	600
Statewide	26%	4.7	

Participation days per capita increase greatly with family size (8 days annually for a family of six members or more, versus 2 days for households with one or two members) and decrease with age (18.1 days annually for the 12 to 17 age group, and 1.4 days for the 45 to 65 group). Students are particularly active, with an annual average of 17 participation days per capita, compared with the Statewide average of 4.7. In the aggregate, residents also indicated a strong latent demand for participation in outdoor games and sports that might be satisfied through the provision of additional facilities.

ICE SKATING

As shown in Exhibit V-12, most of the resident participation in ice skating on a peak seasonal day occurs in South Central Alaska. The exhibit also shows quite high participation by Southwestern residents.

The 12 to 17 age group has the highest average annual participation days per capita (8.5 days, or three times the State average). Roughly the same percentages of men and women ice-skate (25 per cent and 22 per cent), with roughly the same frequency (2.6 days and 2.4 days).

Present participants indicated some dissatisfaction with present facilities; this attitude prevailed throughout the State, and was particularly strong in the Interior Region. There was also strong evidence of latent demand. Virtually all demand for this activity was reported as neighborhood participation.

SNOW PLAY

Snow play is defined as winter recreational outdoor activity centered around snow sledding, tobogganing, and ski jumping. Current resident participation and projected demand are shown in Exhibit V-13.

The proportion of the population participating is fairly constant throughout the State, although Northwestern Alaskans show a slightly higher percentage than the State as a whole, and more than twice the frequency of participation. As would be expected, frequency of participation declines rapidly with age, from approximately 10 days annually per capita for those in the 12 to 17 age group to less than one day for those in the 45 to 65 age group. On the other hand, participation increases dramatically with household size, implying that the low cost of participating in this activity makes it an attractive form of recreation for large families.

ICE SKATING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	25%	1.5	1,000	1,200	1,500	2,300
South Central	22	2.7	5,900	8,000	9,400	16,900
Southwestern	45	5.6	2,500	2,900	3,100	4,100
Interior	12	0.8	600	700	800	1,200
Northwestern	19	2.7	600	700	800	1,200
Statewide	24%	2.5				

SNOW PLAY
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	Percentage Of Total Population Participating	Average Annual Participation Days Per Capita	Participation On A Peak Seasonal Day			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	17%	1.4	1,000	1,300	1,500	2,300
South Central	18	2.0	4,300	5,900	6,800	12,300
Southwestern	15	2.6	1,200	1,400	1,500	1,900
Interior	17	1.2	1,000	1,200	1,400	2,000
Northwestern	20	4.9	1,000	1,200	1,300	2,000
Statewide	17%	2.0				

FLYING FOR PLEASURE

Alaska is widely known as the "flyinest" State in the union. The resident demand survey bore out this fact, with 17 per cent of the population indicating some participation in the activity. Although figures available from the Federal Aviation Agency do not distinguish business from recreational flying, it is felt that there have been substantial increases in the latter, on the basis of a 115 per cent increase in takeoffs and landings at Merrill Field between 1960 and 1968, and a 470 per cent increase at Juneau between 1962 and 1968.

As Exhibit V-14 shows, participation rates are roughly the same in all regions except Southwestern Alaska, where reliance on small aircraft for transportation is quite heavy, especially in the summer months, and the aircraft thus can easily serve as a source of recreation as well.

Men fly for pleasure more than twice as often as women (2.7 days per capita annually versus 1.1).

As would be expected, the percentage of residents flying for pleasure tends to increase with income (11 to 13 per cent of those with incomes between \$1,500 and \$8,000, versus 20 to 22 per cent of those making \$15,000 and up). It is felt that flying for pleasure will become increasingly popular in Alaska as incomes rise and as improved aircraft make it safer to land and take off in rough terrain.

ALPINE SKIING

Alpine skiing is an increasingly popular sport, not only in Alaska but throughout the United States. Information gathered by the Bureau of Outdoor Recreation in its 1965 survey of recreation demand shows that participation has increased tenfold in the last nine years.

Despite this increasing popularity, per capita participation in Alaska still is quite low, as shown in Exhibit V-15. During 1967, it is estimated that 10 per cent of the State's total population participated in alpine skiing, at an average annual participation rate per capita of approximately one day per year - the same rate as that reported nationwide. It should be noted, however, that those who do participate have an average rate of 12 skiing days per year.

Heaviest participation is in South Central Alaska, where residents are close to eight ski areas, two of which are operated for military personnel.

FLYING FOR PLEASURE
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	<u>Percentage Of Total Population Participating</u>	<u>Average Annual Participation Days Per Capita</u>	<u>Participation On A Peak Seasonal Day</u>			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	14%	1.5	700	900	1,000	4,700
South Central	16	1.4	2,000	2,700	3,300	6,200
Southwestern	32	5.3	1,500	1,700	1,900	2,600
Interior	15	1.5	800	1,000	1,100	1,700
Northwestern	15	1.4	200	200	300	400
Statewide	17%	1.8				

ALPINE SKIING
CURRENT RESIDENT PARTICIPATION AND PROJECTED DEMAND
 Selected Years, 1967 Through 2000

<u>Region</u>	Percentage Of Total Population Participating	Average Annual Participation Days Per Capita	Participation On A Peak Seasonal Day			
			<u>1967</u>	<u>1975</u>	<u>1980</u>	<u>2000</u>
Southeastern	7%	0.7	700	900	1,200	2,300
South Central	13	1.5	4,700	6,800	9,000	19,600
Southwestern	8	0.6	400	500	600	900
Interior	10	1.8	2,100	2,700	3,500	6,100
Northwestern	8	1.5	500	600	800	1,400
Statewide	10%	1.3				

Most participation is concentrated in the 12 to 24 age group, which has a per capita participation rate three times that of the State as a whole. Students, members of the armed forces and professionals have the highest participation rates on a per capita basis.

Fully 40 per cent of the participants indicated that they were not satisfied with the facilities available or other factors related to participation. This dissatisfaction may reflect the substantial variation in the quality of existing facilities - especially in South Central Alaska. In addition, there were indications of a large latent demand for this activity, probably because of the concentration of facilities primarily in South Central and Interior Alaska while facilities in the other regions are either quite limited or nonexistent.

C - COMPARATIVE ANALYSIS OF OUTDOOR RECREATION DEMAND

The purpose of this section is to give the reader a broad overview of outdoor recreational demands in Alaska, emphasizing special characteristics of this demand and summarizing the more detailed statistics presented earlier. Accordingly, the comparative analysis is divided into four parts: popularity of Alaskan outdoor recreation activity; resident and nonresident demand; regional differences in resident demand; and forecasts of future growth.

POPULARITY OF ALASKAN OUTDOOR RECREATION ACTIVITY

Exhibit V-16, following, indicates the relative popularity of the 14 major outdoor recreation activities selected for detailed study, on the basis of the percentages of residents and nonresidents who pursue each activity (weighted by total participation days for each group) and the total number of participation days estimated for each activity in 1967.

Trail-related activities (including such subactivities as walking for pleasure, hiking, canoeing, snowmobiling and cross-country skiing) dominate the others, with more than twice the number of participation days of the second most popular activity. Three other outdoor recreation activities - sightseeing, driving for pleasure, and picnicking - also occupy undisputed positions of popularity in the ranking. The correlation of popularity among these four activities implies that they are often participated in simultaneously or on the same day. On the other hand, activities such as flying for pleasure, alpine skiing, snow play and ice skating do not appear to enjoy such frequent or wide-ranging participation, probably because of the higher costs (especially in flying for pleasure), the shortage of adequate facilities, and the generally lower outdoor recreational participation in wintertime.

An important characteristic of outdoor recreational activity in Alaska is the generally higher rates of participation by residents of this State vis-a-vis the rest of the country. While the percentages of population participating in many of these activities are approximately the same as those characteristic of the United States overall, and while higher percentages are to be expected in the natural environment forms of recreation, such as fishing and camping, the annual rates of participation in Alaska in some activities are four to seven times the national average. These comparisons, which were drawn from the basic questionnaire and sampling techniques, are summarized in the table below:

PARTICIPATION IN MAJOR OUTDOOR RECREATION ACTIVITIES

ACTIVITY	PERCENTAGE OF RESIDENTS AND NONRESIDENTS PARTICIPATING ^(a)	1967 TOTAL PARTICIPATION DAYS	
		(MILLIONS)	
Trail-Related Activities ^(b)	83%	16,846,000	16,846,000
Sightseeing	78	6,639,000	6,639,000
Driving For Pleasure	73	6,877,000	6,877,000
Picnicking	71	3,448,000	3,448,000
Fishing	56	3,182,000	3,182,000
Boating	48	2,262,000	2,262,000
Camping	44	1,747,000	1,747,000
Swimming	33	1,780,000	1,780,000
Hunting ^(c)	32	1,837,000	1,837,000
Outdoor Games And Sports	24	1,689,000	1,689,000
Ice Skating ^(c)	18	684,000	684,000
Snow Play ^(c)	13	545,000	545,000
Flying For Pleasure ^(c)	13	511,000	511,000
Alpine Skiing ^(c)	8	370,000	370,000

(a) Weighted average, based on total participation days.

(b) Includes only "walking for pleasure" for nonresidents.

(c) For nonresidents, figures include only the results of the summer survey.

<u>Activity</u>	<u>Per Cent Participating</u>		<u>Annual Participation Days Per Capita</u>	
	<u>United States</u>	<u>Alaska</u>	<u>United States</u>	<u>Alaska</u>
	<u>(1965)</u>	<u>(1967)</u>		
Sightseeing	69%	73%	3	21
Driving For Pleasure	78	73	7	24
Picnicking	80	80	3	12
Walking For Pleasure	68	72	7	28
Fishing	42	64	2	10
Boating	34	54	2	8
Camping	14	43	1	5
Swimming	68	43	7	6

As discussed earlier, a number of facts help to explain this high recreational participation in Alaska. For one thing, life in Alaska is more closely tied to the outdoors than in any other part of the country, and a large part of the State's economy is based upon natural resource industries, such as fishing and timber. Also, many Alaskans give as their main reasons for living in the State its beautiful natural environment, its frontier character, and its fantastic recreational opportunities. Moreover, the relatively young median age of the Alaskan population supports the indicated higher frequency of participation in such rigorous pursuits as trail-related activities, camping in remote areas, hunting and fishing.

RESIDENT AND NONRESIDENT DEMAND

A definite parallel exists between resident and nonresident demand for outdoor recreation. The nine most popular nonresident activities are among the most popular resident activities; only the ranking and relative magnitude of popularity differ.

There is, however, a substantial difference in the volume of total annual participation generated by these two sectors, with residents representing the greatest share of the participation for all activities. This difference is shown graphically in Exhibit V-17. At the same time, it should be pointed out that the projected rate of growth in tourism is expected to alter this relationship substantially, and that nonresidents are expected to account for an ever-growing portion of the total demand. This subject is discussed in more detail later in this section.

COMPARISON OF RESIDENT AND NONRESIDENT PARTICIPATION IN OUTDOOR RECREATION(a)

ACTIVITY	PERCENTAGE PARTICIPATING	AVERAGE ANNUAL PARTICIPATION DAYS PER CAPITA	1967 TOTAL PARTICIPATION DAYS	
			(MILLIONS)	
Trail-Related Activities Residents Nonresidents(b)	87% 71	60.1 2.1	16,664,000 182,000	
Sightseeing Residents Nonresidents	73 97	20.9 9.7	5,798,000 841,000	
Driving For Pleasure Residents Nonresidents	73 74	23.6 3.8	6,548,000 329,000	
Picnicking Residents Nonresidents	80 41	11.8 2.1	3,266,000 182,000	
Fishing Residents Nonresidents	64 32	10.1 1.3	3,069,000 113,000	
Boating Residents Nonresidents	54 27	8.0 0.5	2,218,000 44,000	
Camping Residents Nonresidents	43 47	4.9 4.6	1,349,000 398,000	
Swimming Residents Nonresidents	43 3	6.4 0.1	1,771,000 9,000	
Hunting Residents Nonresidents(c)	40 6	6.4 0.2	1,786,000 51,000	
Outdoor Games And Sports(d) Residents	31	6.0	1,689,000	
Ice Skating(d) Residents	24	2.5	684,000	
Snow Play(d) Residents	17	2.0	545,000	
Flying For Pleasure(d) Residents	17	1.8	511,000	
Alpine Skiing(d) Residents	10	1.3	370,000	

(a) Based on 277,906 residents, and 87,600 nonresidents.

(b) "Walking for pleasure" only.

(c) Estimated percentage based upon nonresident hunting licenses.

(d) No information available for nonresidents, or no significant participation.

Thus, at present, residents are the dominant participators in nearly all of the activities except sightseeing and camping. The high volume of non-resident sightseeing, of course, stems from the well-documented facts that this is by far the most popular outdoor activity for visitors, and that Alaska's scenic beauty is the principal attraction for vacationing tourists.

In the case of camping, nearly 400,000 participation days were generated by visitors in 1967, compared with 1,349,000 resident participation days. A more significant indication of the nonresident volume, however, is that the results of a recent survey by the Parks and Recreation Section showed 44 per cent of the vehicles observed in developed campgrounds to be of nonresident origin.

The principal reason for the lower rates of participation by nonresidents in most activities is their short stays in the State but these lower levels are also in part due to the characteristics of a large group of Alaskan visitors: many are senior citizens who have the time and money to enjoy what the State has to offer but who do not, generally, participate in the more rigorous forms of recreation. On the other hand, a substantial number of visitors, both young and old, take great pleasure in camping out in the great Alaskan out-of-doors - America's last frontier.

It is also important to note that most of Alaska's visitors spend their time in the Southeastern, South Central and Interior Regions, where most of Alaska's people live and where the public systems of transportation are more fully developed. Interviews with nonresidents and the questionnaires mailed back by them indicated that 78 per cent of all tourists visit South Central Alaska, 62 per cent visit the Interior Region, and 58 per cent go to Southeastern Alaska. The outlying areas (Southwestern and Northwestern Alaska) receive only 11 per cent and 20 per cent, respectively.

REGIONAL DIFFERENCES IN RESIDENT DEMANDS

Because of Alaska's size and the uneven population dispersion throughout the State, variances between regions in the volume of resident outdoor recreation participation are to be expected. These variances, however, are much greater than can be explained by population differences alone.

The regions of Southwestern and Northwestern Alaska have an abundance of fish and game, and untouched scenic beauty. These regions thus have a comparative advantage in certain natural environment outdoor recreational activities, as shown in Exhibit V-18, which compares, on a regional basis,

REGIONAL CHARACTERISTICS OF RESIDENT PARTICIPATION IN OUTDOOR RECREATION

ACTIVITY	SOUTHEASTERN REGION		SOUTH CENTRAL REGION		SOUTHWESTERN REGION		INTERIOR REGION		NORTHWESTERN REGION	
	PER CENT PARTICIPATING	PARTICIPATION DAYS PER CAPITA	PER CENT PARTICIPATING	PARTICIPATION DAYS PER CAPITA	PER CENT PARTICIPATING	PARTICIPATION DAYS PER CAPITA	PER CENT PARTICIPATING	PARTICIPATION DAYS PER CAPITA	PER CENT PARTICIPATING	PARTICIPATION DAYS PER CAPITA
Trail-Related Activities	88% (4)	80.9 (3)	95% (1)	46.3 (4)	95% (1)	111.2 (1)	85% (5)	42.0 (5)	90% (3)	89.3 (2)
Sightseeing	81 (1)	35.6 (1)	75 (2)	19.5 (4)	68 (4)	22.3 (3)	74 (3)	10.6 (5)	59 (5)	23.0 (2)
Driving For Pleasure	82 (1)	35.5 (1)	77 (2)	24.0 (2)	57 (5)	23.8 (3)	73 (3)	14.7 (4)	58 (4)	13.4 (5)
Picnicking	88 (1)	16.1 (1)	79 (3)	11.7 (2)	79 (3)	7.5 (5)	84 (2)	11.4 (3)	66 (5)	8.5 (4)
Fishing	67 (2)	13.4 (2)	63 (3)	10.8 (3)	78 (1)	18.1 (1)	52 (5)	6.0 (5)	58 (4)	10.0 (4)
Boating	59 (2)	11.4 (2)	45 (4)	5.7 (4)	86 (1)	20.9 (1)	44 (5)	3.8 (5)	55 (3)	8.9 (3)
Camping	35 (4)	3.2 (5)	44 (3)	5.3 (3)	48 (2)	6.0 (1)	51 (1)	4.1 (4)	34 (5)	5.8 (2)
Swimming	48 (2)	8.8 (1)	41 (3)	6.1 (2)	50 (1)	5.5 (4)	40 (4)	6.0 (3)	33 (5)	4.7 (5)
Hunting	36 (5)	4.6 (5)	38 (3)	5.8 (3)	54 (1)	13.3 (1)	41 (2)	4.9 (4)	38 (3)	10.0 (2)
Outdoor Games And Sports	36 (1)	7.9 (1)	31 (3)	6.0 (3)	25 (5)	4.0 (4)	34 (2)	6.1 (2)	26 (4)	3.6 (5)
Ice Skating	25 (2)	1.5 (4)	22 (3)	2.7 (2)	45 (1)	5.6 (1)	12 (5)	0.8 (5)	19 (4)	2.7 (2)
Snow Play	17 (3)	1.4 (4)	18 (2)	2.0 (3)	15 (5)	2.6 (2)	17 (3)	1.2 (5)	20 (1)	4.9 (1)
Flying For Pleasure	14 (5)	1.5 (2)	16 (2)	1.4 (4)	32 (1)	5.3 (1)	15 (3)	1.5 (2)	15 (3)	1.4 (4)
Alpine Skiing	7 (5)	0.7 (4)	13 (1)	1.5 (2)	8 (3)	0.6 (5)	10 (2)	1.8 (1)	8 (3)	1.5 (2)

NOTE: Circled number represents each region's ranking for this characteristic.

proportions of the populations participating and the frequency of participation in all 14 major outdoor recreational activities. For example, Southwestern Alaska has both the highest proportion of the population participating and the highest average annual participation days per capita in trail-related activities, fishing, boating, and hunting. Northwestern Alaska ranks second or third on the same activities except for fishing, which is somewhat less popular in this region. On the other hand, for such urban-oriented activities as outdoor games and sports, swimming, and driving for pleasure, both of these regions generally rank low.

The larger, more urban populations of South Central and Interior Alaska have outdoor recreational demands more closely resembling those found in the balance of the United States. In these regions, significantly lower percentages of the population participate in such activities as fishing, boating and hunting, and much higher frequencies and percentages are shown for such activities as driving for pleasure, picnicking, sightseeing, and outdoor games and sports. As a result of this facility-oriented demand, the crowding in many areas of these two regions during the peak summer months approaches that found in campgrounds in the 48 states to the south. For example, a brief internal report by the Bureau of Land Management showed that recreation pressures per mile of road in Alaska were at least equal to (and often greater than) the pressures in other states.

Outdoor recreational demand in Southeastern Alaska is somewhat of a mixture, falling between the facility-oriented demand of South Central and Interior Alaska and the natural environment orientation of Southwestern and Northwestern Alaska. Southeastern Alaska ranks first in the State, in terms of both proportion of the population participating and frequency of participation, in such activities as picnicking, sightseeing, driving for pleasure, and outdoor games and sports. On the other hand, it ranks second in the State, right behind Southwestern Alaska, in both of these measures for fishing and boating - apparently reflecting a comparative advantage in these two activities as a result of the extensive inland waterways of the region. Furthermore, the Southeastern Region ranked lowest in the State in participation in hunting and camping, indicating that this region is distinctly different not only from the sparsely populated bush but also from the urban-oriented Interior and South Central Regions.

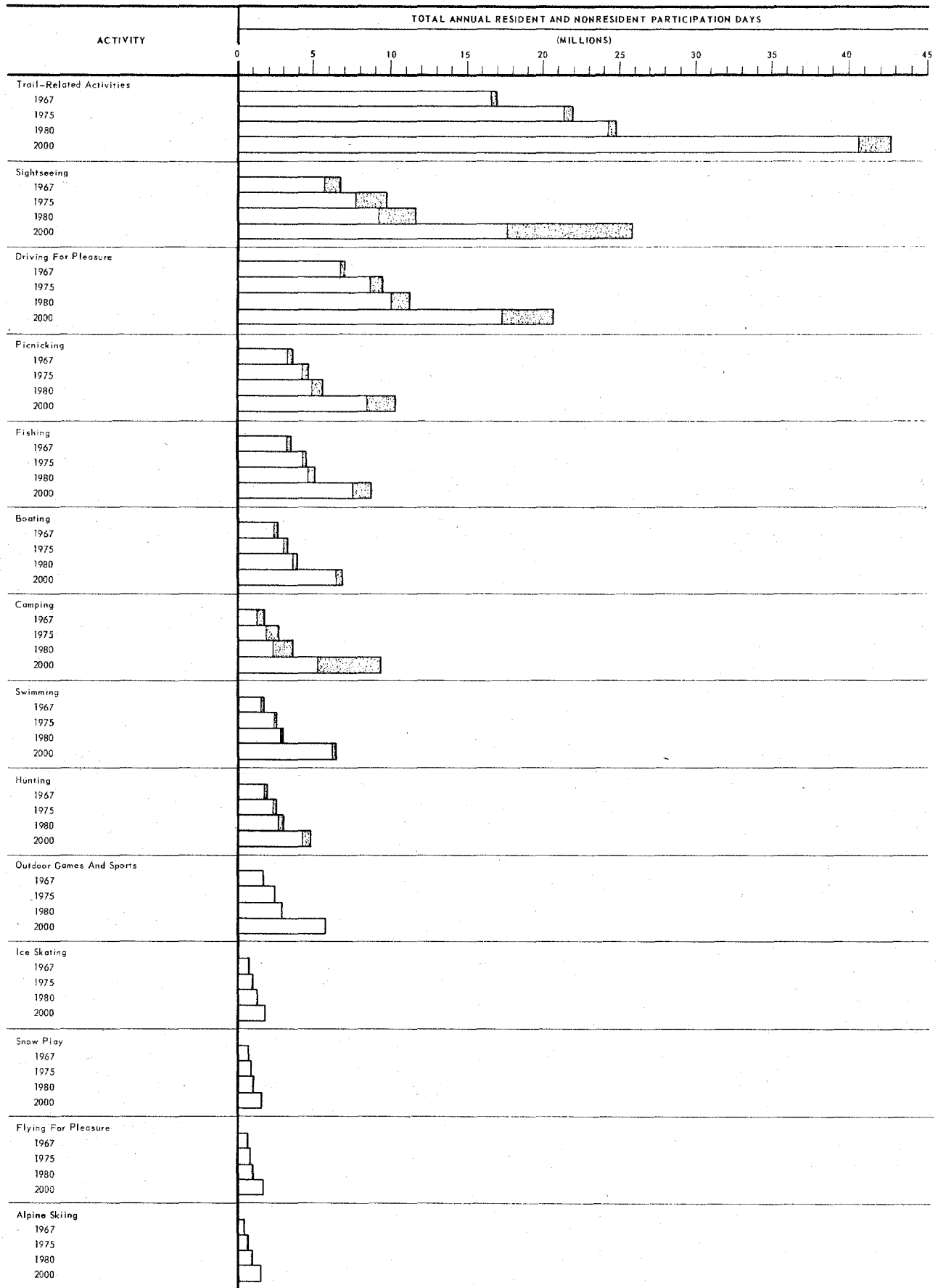
FORECASTS OF FUTURE GROWTH

The anticipated growth in both resident and nonresident demand for outdoor recreation in Alaska is nothing short of startling, and implies a strong need for preserving the areas needed and developing facilities to satisfy the high levels of participation foreseen. With substantial future increases in population and tourist visits, as well as rising per capita rates of participation because of increasing income, additional leisure time and improved mobility, Alaska faces a serious challenge in attempting to plan for the forecast growth.

Exhibit V-19, following, depicts graphically the expected growth in annual participation days for each of the 14 major activities discussed in this chapter. As can be seen, the forecasts indicate increases in total participation rates by the year 2000 of two to four times the present levels, with nonresident participation increasing tenfold.

While most activities will retain their present relative rankings, camping will move up to become the fifth most popular activity, largely because of substantial increases in tourist camping. Moreover, it is estimated that, by the year 2000, approximately 60 per cent of all campers on developed campgrounds will be nonresidents.

FORECAST GROWTH IN RESIDENT AND NONRESIDENT RECREATION



LEGEND:
 Resident
 Nonresident

Chapter VI

NEEDS FOR OUTDOOR RECREATION AREAS AND FACILITIES



Water related recreation on a Southcentral Alaska lake

VI - NEEDS FOR OUTDOOR RECREATION AREAS AND FACILITIES

Alaska's recreation needs are the basic core around which the plan of action for the coming five years and beyond has been tailored. These needs are composed of two separate elements: the quantifiable differences between expected levels of demand and present levels of supply (called "additional needs" in this plan); and the more qualitative needs for programs and policy changes, which require attention in order to satisfy Alaska's recreation demands. Recreation needs, as thus defined, constitute the deficiencies - the goals to be met by the public and private sector over the coming five years.

This chapter concentrates on the quantifiable needs for additional outdoor recreation areas and facilities; Chapter VII covers the related areas of special need.

The chapter is divided into three sections:

- A - Recreation Standards - which discusses the tools used to place supply and demand on common terms, so that the needs can be quantified.
- B - Needs For Developed Recreation Areas And Facilities - which identifies, by activity and by region, the acquisition, development and associated needs for the next five years, together with estimates of needs by 1980 and by the year 2000.
- C - Summary - which briefly reviews the major needs for developed recreation areas and facilities.

A - RECREATION STANDARDS

Recreation standards are rough but extremely useful tools for the recreation planner. They serve the purpose of placing demand and supply data on common terms, so that comparisons can be made and needs can be identified. In addition, they help in estimating exactly what space and facilities must be provided to meet the identified needs. They assist the planner, for example, in determining whether the 2,525 picnic tables which were inventoried in South Central Alaska will be sufficient to handle the estimated 32,000 picnics forecast for that area on a peak day in 1975; or, if they are not sufficient, approximately how many additional picnic units will be needed, together with the associated land and facilities requirements, and the approximate costs.

For the most part, recreation standards are quantitatively oriented, in terms of a practical and discrete unit of supply, such as a camp unit or a picnic unit. Sightseeing areas and facilities, on the other hand, represent a resource which Alaska has in abundance but which cannot be measured in any practical sense. Moreover, the quantitative standards developed for this plan cover only those activities for which planning and action can be expected to influence the future supply. For example, standards have not been developed in this plan for mountain climbing with gear, since little can be done to influence the future supply of the basic resource (mountains). Here, in fact, the constraint for those who wish to climb is not so much the supply of mountains as it is the access to these mountains.

Similarly, no standard has been developed for hunting, since the amount of land available for hunting in Alaska is tremendous and nearly impossible to define and measure, and complete statistics on hunter success and herd sizes are not available. Here, as in a number of other activities, the practical constraint against greater opportunity for recreation is the difficulty of access.

As a general rule, standards in Alaska can be applied more readily to facility-oriented recreation, and high-density recreation activities, such as golf, or camping in a developed area. For the present, at least, standards have only limited application in resource-oriented activities. Standards have not been developed for Wilderness Areas, and their applicability to outstanding natural areas or cultural sites seems restricted.

One other feature of standards deserves attention - namely, that a standard must be a compromise between the level and quality of service desired by the participant and the service which the public or private sector can practically provide. For example, a skier might take great pleasure in having a

slope almost entirely to himself, with no waiting line for the lift. However, since this would almost certainly be impractical for the operator, a compromise is built into the standard, at a level between the privacy desired by the participant and the maximum utilization desired by the operator. In general, the standards for this plan have been designed to reflect an atmosphere of spaciousness and quality which is believed to be consistent with the spaciousness and unique natural qualities of the State.

The following material defines the basic standards used in this plan, explains how they were developed, presents the standards themselves, and discusses some considerations which should be taken into account in interpreting Alaska's recreation needs.

DEFINITIONS

A certain amount of confusion attends the use of recreation standards because of the variety of approaches to developing standards and the different terms which are used to describe them. For this plan, three basic kinds of standards have been developed.

A use standard is a quantitative conversion factor which can be applied to a basic unit of supply to estimate the demand which the unit can handle. For example, a developed campsite is expected to accommodate one group of campers in a day's time, and experience indicates that the average number of people in such a group is 3.6. Thus, the use standard for campsites is 3.6 people per campsite. In some activities, such as picnicking, it is likely that a facility will be used by more than one group, or that some of the use made of the facility will be for only part of the available day, thus freeing it for a second group of users. The term turnover is used to describe the number of uses which an area or facility can be expected to receive in a 24-hour period. For outdoor games and sports, where complete information on participation by those under the age of 12 is not available from the demand survey, the use standard is based upon total population - for example, three acres of playground for every 1,000 residents of an area.

A design standard is a specification of the basic features or components of a unit of supply. It elaborates on the use standard to give a more complete picture of what land area and facilities are included in the unit of supply to provide the type and quality of recreation experience desired. For example, a campsite includes one-fourth acre of ground, a parking space, a table and bench, a fireplace, a tent pad, a trash can, a drain, one-twentieth of a double latrine, and one-sixtieth of a well. A design standard is thus a guide to what

is required for the quality of recreation experience which is desired. In addition, design standards reflect legal considerations, such as health and sanitation codes.

A cost standard is an estimate of the cost of providing the land and facilities specified in the design standard.

One additional tool was developed and applied to the data to make comparisons of demand and supply data possible - an estimate of the percentage of demand requiring formal facilities. This estimate was required because many activities in Alaska are carried out both at developed sites and at undeveloped natural areas. Picnicking, for example, occurs not only at picnic tables and benches but also in undeveloped areas where people spread a blanket on the ground. Tennis, on the other hand, almost always takes place on a formally provided facility. The separate volume of Appendixes provides information on the percentage of demand for formal facilities used for each activity.

STEPS IN DEVELOPING STANDARDS AND ESTIMATES OF TURNOVER

The development of outdoor recreation standards and estimates of turnover involved six steps, described below.

1. Where available, pertinent data on recreation in Alaska were collected, such as the results of a 1964 survey of campers, which provided indications about the average number of campers and picnickers in a group and the kinds of facilities these people desire.

2. The second step was to review use standards and turnover statistics developed by other states and organizations, as set forth in the Bureau of Outdoor Recreation publication, "Outdoor Recreation Space Standards," and in the more recent plans of states (such as Wisconsin) which have environmental characteristics somewhat similar to those of Alaska.

3. From this review, preliminary use standards and estimates of turnover were developed for all activities to which standards could practically be applied. Of the 14 major activities which were discussed in Chapter V, seven were considered amenable to standards: selected trail-related activities (such as hiking, canoeing, etc.), picnicking, camping in developed areas, swimming, outdoor games and sports, ice skating, and alpine skiing. Standards and estimates of turnover were not developed for sightseeing, driving for pleasure, hunting, snow play (primarily sledding and tobogganing), or flying for pleasure. (For an explanation of how needs for boating facilities were projected, see pages VI-23 and VI-24.)

4. These preliminary standards and turnover estimates were then reviewed with the Alaska Outdoor Recreation Council, and a number of useful ideas which came from this review were incorporated into the use standards.

5. Next, design standards and cost standards were developed on the basis of the desired levels of quality and the experience of the Department of Natural Resources and other public and private agencies.

6. Finally, the completed package of use, design and cost standards and estimates of turnover was adopted and used in this plan.

STANDARDS AND TURNOVER ESTIMATES USED IN THIS PLAN

Exhibit VI-1, following, shows the standards which have been developed for use in this plan. The standards first define the basic unit of supply, such as a mile of developed trail or a swimming pool, and then define the number of people the unit should be capable of handling at one time and the number of times the facility is likely to be used by a different group or person during one day (turnover). Next, the design standards for facilities and space are presented, and finally, the unit cost for these facilities and space is estimated.

There are a variety of ways in which these standards can be used, one of which is to determine the capacity of the present supply. Exhibit VI-2 shows the 1967 estimated peak day capacities (in terms of number of participants) of the areas and facilities for which standards were developed, together with estimates of peak day demand for formal facilities. As can be seen, demand was nearly always in excess of supply, indicating that present facilities and areas are inadequate to handle present demands, are overcrowded, or in some cases do not exist.

CONSIDERATIONS REGARDING STANDARDS AND RELATED CONCEPTS

Outdoor recreation standards and similar quantitative tools can be regarded as extremely useful guidelines which are based upon data collected in the field and on judgment and experience. There are, however, certain considerations which should be taken into account in interpreting the needs they indicate.

RECREATION SPACE AND FACILITY STANDARDS

Activity	Basic Unit Of Supply	Use Standard		Design Standards		Cost Standards	
		Number Of Persons At One Time	Turnover Per Day	Facilities	Space	Facilities	Space Acquisition(a)
Trail-Related Activities	1 mile of trail	10 (or 1/10 mile per person)	1.5	1 mile of trail	12 acres	\$4,000/mile(b)	\$4,800/mile @ \$400/acre
Picnicking	1 picnic unit	4.9	1.5	1 parking space 1 table 2 benches 1/2 fireplace 1/2 trash can 1/10 double latrine	1/4 acre	\$1,000/picnic unit	\$250/picnic unit @ \$1,000/acre
Camping	1 camp unit	3.6	1.0	1 parking space 1 table 1 fireplace 1 bench 1 trash can and 1 drain 1 tent pad 1/20 double latrine 1/60 well	1/4 acre	\$1,500/camp unit	\$250/camp unit @ \$1,000/acre
Swimming Pool	1 pool of 5,000 square feet	167 (or 30 square feet per person)	3.0	Water area (5,000 square feet) Deck area (3,260 square feet) Building area (11,640 square feet) 100 parking spaces Landscaping	1/2 acre	\$513,500/pool	\$1,500/pool
Ocean, lake, pond or stream	300 front feet of beach area	100 (or 3 front feet per person)	1.5	1 bathhouse 1 diving board and float 1 double latrine 25 parking spaces	10 acres	\$10,000/developed area	\$10,000 @ \$1,000/acre of developed area
Outdoor Games And Sports Playground area	1 acre of developed area	n. a. (c)	n. a. (c)	Playground Turf field - games area Hard-surface games court	1 acre	\$5,000/acre of developed area	\$3,000/acre of developed area
Golf	One 9-hole golf course	50	7.0	Fairway, rough greens and tees (43 acres) Clubhouse (1/4 acre) Parking and service road (1-3/4 acre) Natural and landscaping (10 acres)	55 acres	\$350,000/9-hole course	\$165,000/9-hole course @ \$3,000/acre
Tennis	1 tennis court	3.5	14.0	1 blacktopped tennis court with fence and net	1/6 acre	\$6,250/court	\$500/court @ \$3,000/acre
Ice Skating	3 acres of skating area	90 (or 1/30 acre per person)	5.0	Developed site - hockey rink, figure skating circle, and speed skating oval; or natural site - 20 parking spaces, 1 warmup hut and 1 double-vaulted latrine	3 acres	\$15,500/3 acres	\$9,000/3 acres @ \$3,000/acre
Alpine Skiing	1 acre of developed ski area	10.0 (or 1/10 acre per person)	1.2	1 acre of ski area 100 feet of lift with capacity for 750 skiers per hour 2 parking spaces 40 square feet of lodge	1+ acres	\$9,000/acre or 100 feet of lift	\$1,000/acre or 100 feet of lift

n. a. - not applicable.

(a)Cost of land, which may not be applicable if land can be selected, or if it is already publicly owned and can be dedicated to outdoor recreation.

(b)Canoe trail development is estimated at \$500/mile for clearing and marking.

(c)Population standard of 3 acres per 1,000 population, with a minimum of 2 acres for each community.

**1967 PEAK DAY CAPACITY AND DEMAND
FOR SELECTED ACTIVITIES AT DEVELOPED SITES**

Region	Trail-Related Activities							Camping (Developed Area)	Swimming		Outdoor Games And Sports		Ice Skating	Alpine Skiing
	Bicycling	Hiking	Snowmobiling	Canoeing	Horseback Riding	Cross-Country Skiing	Picnicking		Pool	Ocean, Lake, Pond And Stream	Tennis	Golf		
Southeastern														
Capacity(a)	0	2,112	18	0	234	42	1,448	1,961	338	213	100	0	0	400
Demand(a)	525	1,900	90	525	100	180	7,316	2,200	2,300	1,250	600	200	900	630
Ratio(b)	0%	111%	20%	0%	234%	23%	20%	89%	15%	17%	17%	0%	0%	63%
South Central														
Capacity(a)	24	1,836	1,836	1,392	390	1,746	18,560	7,884	1,080	1,220	1,350	1,050	2,700	4,804
Demand(a)	1,536	5,200	2,430	1,725	1,950	1,170	16,968	12,900	1,900	4,400	1,400	1,400	5,310	4,230
Ratio(b)	2%	35%	76%	81%	20%	149%	109%	61%	57%	28%	16%	75%	51%	114%
Southwestern														
Capacity(a)	0	168	0	0	0	0	74	208	0	100	0	0	0	0
Demand(a)	307	800	560	450	50	40	2,132	2,000	300	900	200	0	2,250	360
Ratio(b)	0%	21%	0%	0%	0%	0%	3%	10%	0%	11%	0%	0%	0%	0%
Interior														
Capacity(a)	0	324	300	822	42	114	1,154	2,980	633	483	700	350	450	2,448
Demand(a)	614	1,200	900	1,200	400	90	6,420	4,500	1,000	1,400	300	800	540	1,890
Ratio(b)	0%	27%	33%	69%	11%	127%	18%	66%	63%	35%	233%	44%	86%	130%
Northwestern														
Capacity(a)	0	0	0	180	0	0	0	23	0	0	0	0	0	0
Demand(a)	166	200	360	75	0	40	1,248	800	400	200	0	0	540	450
Ratio(b)	0%	0%	0%	240%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%
Statewide														
Capacity(a)	24	4,440	2,154	2,394	666	1,902	21,236	13,056	2,051	2,016	2,150	1,400	3,150	7,652
Demand(a)	3,148	9,300	4,340	3,975	2,500	1,520	34,084	22,400	5,900	8,150	2,500	2,400	9,540	7,560
Ratio(b)	1%	48%	50%	60%	27%	125%	62%	58%	35%	25%	86%	58%	33%	101%

Note: Demand figures include only that portion of total demand estimated to require formal facilities, as explained in text and defined in the separate volume of Appendixes.

- (a) Number of peak day participants.
- (b) Capacity as a per cent of demand.

First, and perhaps most important, standards can be no more reliable than the supply and demand data to which they are applied. If the supply information, for example, is incomplete, a good standard may identify a need even though existing (but unreported) areas and facilities are already available to meet that need. Similarly, if the demand information overstates the level of participation, or if growth forecasts are overoptimistic, a need will be identified even though the actual demand may not materialize as early as expected.

Second, as discussed in the previous chapter, it is important to keep in mind that the forecasts of demand developed in this plan are based on present participation, and thus do not reflect any latent demand which is unmet because of the absence of facilities at this time. As a result, actual needs may exceed those shown whenever there is substantial latent demand for participation in an activity.

A third consideration has to do with the fact that, in the absence of complete statistics on actual participation in most activities, many standards have been based in large part upon experience and judgment, and to this extent may reflect inaccuracies. Judgment, for example, was used to supplement existing data in estimating the percentage of annual demand that occurs on a peak day, in developing use, design and cost standards, and in estimating what part of the demand requires formal facilities.

A fourth consideration stems from the fact that standards are generalizations. Cost standards, for example, do not reflect the variances in development costs that might be associated with differences in geographic location or with different sizes of facilities. A large campground near Anchorage is likely to be cheaper on a per unit basis than a small one near Mt. McKinley, because of transportation costs and because of the economies of large-scale construction.

Similarly, the standards do not reflect type of ownership, or location in relation to population centers. A private operator may well choose to provide more elaborate facilities, at a higher cost than is indicated by the standards in this plan, so that he may attract well-to-do customers and charge a price which will cover his costs. Facilities located close to urban areas are likely to be more compact than the standards indicate, because of the higher cost of land. Inflation, too, will eventually outdate the standards.

Finally, because standards are applied to rather large geographic regions, they may not accurately reflect circumstances at an individual location within a region. For example, the data may indicate a surplus of one type of facility in South Central Alaska even though one popular facility near Anchorage is

always crowded. On the other hand, the data may indicate a shortage of picnic areas in a region despite the fact that some areas in that region are rarely used. Thus, the data may indicate regional surpluses or deficiencies that do not apply to individual facilities because of their location or the quality desired by participants.

In summary, the standards and the approaches used to determine Alaska's recreational needs do have limitations which should be considered in interpreting the data. This does not mean, however, that the data and the projected needs are unsound. Indeed, they are believed to provide a basically accurate picture of how the present supply and demand compare, where the major areas of need are (by activity and by region), and how much it is likely to cost to meet these needs.

B - NEEDS FOR DEVELOPED RECREATION AREAS AND FACILITIES

This section focuses upon Alaska's specific recreation needs, by activity, over the coming five years and beyond, which should be provided by the public and private sectors.

Wherever standards have been considered an appropriate way to determine future needs, the text identifies, by region, the present supply and the additional needs for the years 1975, 1980, and 2000. Additional detail regarding needs (beyond that found in this text) is provided in the separate volume of Appendixes. For each activity, both the present supply and the additional needs are expressed in terms of basic units of supply, such as number of camp units or acres of developed ski area. More detailed descriptions of these basic units can be found in the design standards as previously defined in Exhibit VI-1.

Wherever standards could not be used, future needs are treated in more qualitative and general terms.

It should be noted that the term "additional needs," as used here, refers to the difference between the existing supply of areas and facilities and the total supply which will be needed in future years to handle expected levels of demand. The term "total needs," on the other hand, refers to the existing supply plus additional needs. Moreover, the "additional needs" identified in this chapter do not take into account the expected increases in the existing supply which are already planned (or "programmed") for the coming years. The differences between "additional needs" and "programmed" areas or facilities are termed "deficiencies," and are the subject of one section of the separately bound plan of action (Volume Three), in which are also discussed the estimated costs of meeting Alaska's needs for outdoor recreation.

The presentation of material in this section parallels the review of demand for the same activities in Chapter V.

TRAIL-RELATED ACTIVITIES

Alaska's future needs for 12 trail-related activities are discussed below, in the following order:

- Walking for pleasure
- Nature study

- Bicycling
- Hiking
- Snowmobiling
- Motorcycling
- Snowshoeing
- Canoeing
- Horseback riding
- Dogsledding
- Cross-country skiing
- Mountain climbing with gear.

For bicycling, hiking, snowmobiling, canoeing, horseback riding and cross-country skiing, standards were applied to the demand forecast for the years 1975, 1980 and 2000, to determine total needs; the present supply was then subtracted from total needs to determine the additional needs for trail mileage. It should be kept in mind, however, that total trail needs are likely to be less than the sum of the individual needs identified because of opportunities for multiple use of trails, particularly in summer and winter activities. The following types of multiple usage are recognized, and should be considered in the design of the needed trails, to the extent practical:

- Snowmobiling is possible on bicycle trails, such as those located within highway rights-of-way.
- Snowmobiling is also possible on any motorcycle trail.
- Cross-country skiing is possible on walking, hiking and horseback trails which are not overly steep and which do not turn sharply at the bottoms of hills (thus affording enough of a runout to permit decelerating before turning).
- Dogsledding is possible on well-frozen, snow-covered canoe trails if the portages are not too steep.
- Motorcycling is possible on snowmobile trails which do not cross wetlands or water.

- Bicycling is possible on smooth-surfaced snowmobile trails which do not cross wetlands or water and which are not used by motorcycles.
- Walking for pleasure and hiking are both possible on those horseback-riding trails which do not experience heavy horseback use, and on those cross-country skiing trails which do not cross frozen wetlands or water.
- Horseback riding is possible on walking and hiking trails which are not overly steep, and on all cross-country skiing trails which do not cross frozen wetlands or water.

In addition to the discussion in this section of the needs for each of these trail-related activities, one part of Chapter VII discusses an overall National or State trail system and the need for uniform trail-marking devices.

Walking For Pleasure

Walking for pleasure is a very popular activity for resident Alaskans, and one which will see an increase in total participation of 20 per cent between now and 1975, and 110 per cent between now and the year 2000. While this activity tends to accommodate itself to nearly all kinds of surroundings, including side-walks, open spaces, parks and paths, there is a need (as discussed later in connection with sightseeing) to develop marked routes, pathways and trails leading to interesting attractions in and near many of Alaska's cities. Such routes probably would be heavily used by those who enjoy walking for pleasure.

Nature Study

Nature study is closely related to walking for pleasure, sightseeing and hiking, in that it generally involves the study of plants, trees, fish, birds and game. It is a very popular activity, and one which residents pursue not only on outings and vacations but also during spare hours during the day near home. Neighborhood participation accounts for 62 per cent of the nature study reported, a statistic which further attests to the unique recreational environment of Alaska.

As might be expected, it is impossible to arrive at a practical definition of the supply of nature study resources in Alaska. Needless to say, the features which are studied are extremely abundant, and participation occurs in a wide variety of areas - along trails, on beaches, and in the open country.

Two general needs, however, can be identified. The first is the need for pathways and trails, as already mentioned in connection with walking for pleasure and discussed more thoroughly later in this section in connection with sightseeing, and in Chapter VII under the general topic of trails. The second need is for better interpretive facilities throughout the State, to explain to residents and nonresidents walking on paths or driving by an area, what it is that they are observing and what its most interesting features are. Interpretive facilities can be a relatively inexpensive way of enhancing color and interest for both visitors and residents, telling them about the unique environment they enjoy in Alaska.

Bicycling

In Alaska, as in other states, most bicycling for pleasure occurs on sidewalks, streets, open areas and roadways. Thus, while it is known that four miles of trail are available for bicycle riding in South Central Alaska, these four miles do not by any means represent a measure of the overall supply of areas available for the activity.

Bicycling is becoming increasingly popular in Alaska, and participation is expected to increase 25 per cent by 1975, and 115 per cent by the year 2000. With this growth will come the need to develop more pathways in the cities, as well as trails outside immediate urban areas which are devoted primarily to seasonal bicycle use. Such paths and trails not only provide a more pleasant environment in which to bicycle but also are safer for cyclists and help to avoid conflicts with cars, trucks and pedestrians.

To obtain a clearer picture of what might be involved in developing the desired type of bicycle system for Alaska (perhaps modeled on the Scandinavian system), two assumptions were applied to the data. First, it was assumed that 10 per cent of the bicycling in urban areas should be on bicycle paths; second, it was assumed that 50 per cent of the bicycling away from the neighborhood should be on trails or pathways. The resulting forecast of needs is shown in the table below:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	-	42
South Central	4	132
Southwestern	-	22
Interior	-	48
Northwestern	-	<u>13</u>
Statewide	4	257

As this table shows, an estimated 257 miles of trail would be required by 1975 to meet this need, more than half of which would be in South Central Alaska. By the year 2000, the need would increase to 450 miles.

The bulk of this trail mileage would be required in and around the urban centers, since approximately 93 per cent of all bicycling for pleasure is a neighborhood activity. Thus, the responsibility for providing most of these trails would lie with the cities and boroughs.

The balance of the needed bicycle paths would be required within one or two hours' peddling time from the cities, and might involve separate paths in the highway rights-of-way or merely a widening of shoulders along existing roadways to permit safer and more enjoyable bicycling. In addition, it would be highly desirable, in designing all new highways, to provide wide shoulders or space within the right-of-way for bicycle trails. Trail construction (if needed) and marking could then be handled at a later time by recreation agencies.

While the total cost of the proposed 257-mile system could be quite high, one feature of these trails might make them highly practical. It appears possible to design such trails, particularly around urban areas, to serve basic summer seasonal use for bicycling and also winter use for snowmobiling. Considerable savings might be possible if such a dual-purpose system were developed, and at the same time needed facilities would be provided for two of Alaska's most popular recreational activities. This possibility is discussed further in the later analysis of snowmobiling needs and in the plan of action (Volume Three).

Hiking

Alaska offers tremendous opportunities for hiking throughout the State, in mountainous areas, near lakes and streams, along tidal shorelines, and in and around historic sites and natural features. Thus, it is not surprising that hiking trail needs to 1975 are high. Although Alaska already has 761 miles of publicly and privately administered trail devoted primarily to hiking, present estimates (which assume that 50 per cent of all hiking in Alaska requires formal facilities, with the balance taking place in undeveloped areas - above timberline, for example) call for 516 additional miles by 1975, as shown below:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	373	-
South Central	306	339
Southwestern	28	62
Interior	54	95
Northwestern	-	20
Statewide	761	516

Approximately two-thirds of the additional hiking trails will be needed in South Central Alaska. Beyond 1975, needs will continue to grow at a rapid rate. By 1980, additional needs will reach 946 miles, and by the year 2000, 1,888 miles.

While a great deal of the hiking (55 per cent) occurs away from home on vacations, trips and outings, a substantial need (approximately 45 per cent) will exist near urban areas. In designing the required trails, particularly those close to urban areas, consideration should also be given to their potential winter use for cross-country skiing. As with snowmobiling and bicycling, this approach can provide joint facilities for both activities, thus avoiding costly duplication.

Further discussion of hiking trails may be found in the part of Chapter VII which deals with possible National or State trail systems and trail markers.

Snowmobiling

As shown below, Alaska needs approximately 317 additional miles of snowmobile trails between now and 1975:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	3	11
South Central	306	148
Southwestern	-	53
Interior	50	70
Northwestern	-	<u>35</u>
Statewide	359	317

This estimate is based upon providing developed trail for 90 per cent of the demand in the Southeastern, South Central and Interior Regions, and 10 per cent of the demand in the other two regions. There is less need to clear trails in Southwestern and Northwestern Alaska because so much of the country is open tundra. However, there is a need for a trail-marking system, such as that begun by the State's Rural Development Agency.

Even this figure of 317 miles, however, which represents nearly a doubling of the present capacity, may be conservative, since the popularity of snowmobiling has grown dramatically even since 1966-67, when the bulk of the demand data was collected in the Southeastern, South Central and Interior Regions. (Statistics from the Southwestern and Northwestern Regions were collected in 1968, and therefore may better reflect future needs in those regions.)

This rapid growth in demand is expected to continue, to 145 per cent of the present levels by the year 2000, with a consequent need for 1,066 total miles of trail at that time.

Designing the needed snowmobile trails presents somewhat of a challenge because, while most (95 per cent) of the reported participation occurs as a neighborhood activity, the noise of these machines (like that of the motorcycle) makes it desirable to locate the trails away from residential areas. Thus, the selection of locations will be of major importance in the design of good snowmobile trails. In addition, existing conflicts between cross-country skiers and snowmobilers regarding trail use point up the need for better recreation zoning, a subject discussed in Chapter VII.

As mentioned previously, it may also be possible to design joint snowmobile and bicycle trails along the main roads and in open spaces near urban areas. A brief comparison of the mileage needs for these two activities reveals that, except in Southeastern Alaska, each region's needs are generally comparable, with snowmobile trail requirements somewhat in excess of those for bicycle trails:

<u>Region</u>	<u>Additional Needs To 1975 (Miles)</u>	
	<u>Bicycling</u>	<u>Snowmobiling</u>
Southeastern	42	11
South Central	132	148
Southwestern	22	53
Interior	48	70
Northwestern	<u>13</u>	<u>35</u>
Statewide	257	317

As another opportunity to develop multiseasonal use, some snowmobile trails away from urban areas might be designed to accommodate motorcycling, the next activity to be discussed.

Motorcycling

As was indicated in Chapter V, motorcycling in Alaska is a very popular seasonal activity, with an estimated 10 per cent of the population participating for an annual average of 3.5 days per capita. Forecasts for future growth call for a 30 per cent increase in total participation to 1975.

For this plan, no attempt has been made to measure present supply quantitatively, since much of the motorcycling takes place on roads which serve a wide variety of purposes. Nonetheless, it is felt that, with the increasing volume of motorcycling foreseen, there will be a commensurate need to develop scramble hills and trails, at short distances from urban centers, to provide motorcycling opportunities where noise will not bother others and where cyclists can enjoy a variety of terrain without conflicting with other recreationists. As

noted previously, it may be possible to develop motorcycle trails in conjunction with snowmobile trails, thus establishing year-round motorized recreation trails away from residential areas.

Snowshoeing

Snowshoeing is enjoyed in many of the northern states, but Alaska is the only state in which participation is high enough to warrant selecting this activity for discussion as an important recreation. For many Alaskans, snowshoeing is as much a part of their culture as surfing is for Hawaiians.

Snowshoers use trails built for other activities, and can even get about without trails except in heavy brush. Snow-covered roads and frozen stream beds also provide access. Fortunately, the supply of areas available for participation is nearly unlimited, and there is no need for special attention to providing additional snowshoeing areas or facilities.

Canoeing

Like snowshoeing and snowmobiling, canoeing is a very popular recreational activity in Alaska - probably more popular on a relative basis than in many other states. Alaska already has 399 miles of designated canoe trail, and the rapidly rising participation indicates a need for approximately 227 additional miles by 1975:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	-	50
South Central	232	82
Southwestern	-	40
Interior	137	55
Northwestern	<u>30</u>	<u>-</u>
Statewide	399	227

This estimate is based upon the assumption that 75 per cent of canoeing should take place on designated canoe trails which have been rated in terms of difficulty and which are administered by public, quasi-public or private agencies.

The need is spread somewhat evenly over the State except in the Northwestern Region, where the existing 30 miles of trail should be sufficient through 1975. By the year 2000, a Statewide total of 966 miles will be needed.

However, even these estimates of need may be conservative, since it is considered very likely that the addition of more miles of canoe trail (if conveniently located) would generate new participation beyond that anticipated by the demand survey.

In addition to the canoe trail mileage, there will be a need for designated access points where canoeists can leave their cars, and for supporting facilities along the canoe trails, such as picnic areas and campgrounds. These supporting facilities can provide for related activities which canoeists will also desire and which will enhance their canoeing experience.

Horseback Riding

Alaska should nearly triple its horseback riding trail mileage by the year 1975 in order to meet the projected demand. These needs, as shown in the table below, are primarily centered in the South Central Region, where the bulk of Alaska's horses are kept:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	39	-
South Central	65	170
Southwestern	-	3
Interior	7	27
Northwestern	<u>-</u>	<u>-</u>
Statewide	111	200

This estimate assumes that trails should be provided to handle 50 per cent of the horseback riding participation. Beyond 1975, the need is expected to increase to a total of 345 miles of trail by 1980, and 591 miles by the year 2000. Trails will be needed both near urban centers (where 53 per cent of the horseback riding occurs) and in remote areas (where 39 per cent of the participation occurs).

As with most of the other trail-related activities, a large portion of this mileage might be designed to serve other uses as well. In remote areas, there is an opportunity to develop a trail system which might provide access for hunters, fishermen, campers and other recreationists to areas and facilities which otherwise would rarely be used. Closer to the urban centers, joint horseback riding/cross-country skiing trails could be developed.

Dogsledding

Dogsledding is another recreational activity that is more important in Alaska than in other states, and one that should continue to grow in popularity, even though its importance as a form of transportation in the bush is likely to continue to decline as it is replaced by the snowmobile. Present data indicate that total participation will probably increase 10 per cent by 1975, and 70 per cent by the year 2000.

Although dogsledding is an important element in numerous winter carnivals throughout Alaska, much of the demand for this activity is satisfied by the natural environment, so that there is little need to plan and develop areas and facilities. However, selected parts of available bicycling, horseback riding or ice-covered canoe trails, etc., might be specifically designated for winter dogsledding use. Dog mushers' organizations have cleared and maintained racing trails near many communities. It is increasingly necessary to obtain permanent recreational rights-of-way for those trails now being used for sled dog races and recreational dog mushing near those communities that are expanding. This will provide dogsledding opportunities close to the urban centers where most racing occurs, while helping to avoid major conflicts among snowmobilers, cross-country skiers and dogsledding enthusiasts.

Cross-Country Skiing

The data collected for this survey do not indicate substantial need for additional cross-country ski trails in Alaska between now and 1975. Only 21 additional miles will be needed in Southeastern, Southwestern and Northwestern Alaska, as shown below:

<u>Region</u>	<u>1968 Supply (Miles)</u>	<u>Additional Needs To 1975 (Miles)</u>
Southeastern	7	15
South Central	291	-
Southwestern	-	3
Interior	19	-
Northwestern	-	3
Statewide	317	21

This estimate is based on the assumption that trails should be provided for 90 per cent of the participation in Southeastern, South Central and Interior Alaska, and for 10 per cent of the participation in the Southwestern and Northwestern Regions. The rationale underlying this assumption is that there is less need to clear trails in Southwestern and Northwestern Alaska because so much of the country is open tundra.

Beyond 1975, the estimated surpluses shown above will disappear, and needs are expected to grow to 384 total miles by 1980 and 587 miles by the year 2000. It should be pointed out, however, that the large size of Alaska's five planning regions may result in a surplus being identified for a region overall while the inconvenient location of some trails may cause shortages in certain parts of the region. Moreover, needs may grow much faster than the forecasts indicate, because the data for Southeastern, South Central and Interior Alaska were collected in 1967 and since that time schools have been placing increased emphasis on cross-country skiing as a winter outdoor recreational activity in conjunction with their physical education and inter-scholastic sports programs. In fact, it appears that this emphasis and the resulting competition between Alaskan and Canadian cross-country skiers may soon produce some of the finest skiers in North America.

Thus, while it is likely that most of the forecast need may be met by designing cross-country skiing into trails built for other use in the summer (such as hiking and horseback riding), increasing participation should be closely monitored so that any unexpected and rapid rise can be quickly met through the provision of additional facilities.

Because 88 per cent of the participation in cross-country skiing takes place as a neighborhood activity, most of the trails should be located near urban centers, with special attention to the provision of space near schools.

Mountain Climbing With Gear

The volume and variety of ranges and peaks in Alaska offer almost unlimited opportunities for challenging mountain climbing. Quantitative needs have not been developed for this activity, since the basic unit of supply is mountains. It does appear, however, that improved access would enhance opportunities to participate in this activity, by making it possible for climbers to drive, fly or hike to additional interesting climbing areas; such trails could also serve cross-country skiers in winter. Similarly, shelters located along trails near climbing areas would provide an opportunity to rest before and after the climb.

Moreover, consideration should be given to placing additional small cabins near the summits of comparatively accessible peaks that offer interesting or unusual scenic vistas. The Mountaineering Club of Alaska and the Alaska Alpine Club have already built six cabins of this type in the Chugach and Alaska Ranges. The approach has also been used in Greece for some time, and has proved to be extremely popular with both residents and tourists.

SIGHTSEEING

As noted in Chapter V, Alaska's scenic variety and beauty make sightseeing the State's second most popular major recreational activity, especially for the rapidly growing volume of tourists. While it is impractical to attempt to relate the supply of sightseeing opportunities to the demand, it is not impossible to define needs and potential improvements. Some of these needs were identified in the recent Cresap, McCormick and Paget study of tourism in Alaska, referred to earlier, as follows:

".....Alaska has a nearly inexhaustible inventory of attractions. However, a number of factors restrict a tourist's exposure and appreciation, and have frequently combined to make a visit to the State less rewarding than it could be. First, a tourist frequently finds it difficult to learn what there is to see and do in the area..... he often may be directed to schools, stores and small industrial operations..... which may not be of..... interest to the tourist. Left unmentioned are nearby scenic areas, historic sites and enclaves of Indian and Eskimo cultures. Although many Alaskan communities have an interesting heritage, tourists do not usually learn about them because, with few exceptions, little has been done to maintain or recreate the State's rich history."

Development of these attractions is needed not only for the tourist but also for the resident (the average Alaskan goes sightseeing approximately 21 days per year). In fact, it is likely that resident enjoyment of these areas and facilities would exceed that of nonresidents in terms of annual participation.

While many improvements will require action by the private sector, the public sector can, and should:

- Develop an inventory of the major scenic attractions in and around each community.
- Where necessary, establish programs to improve the quality of the areas and facilities to make them more interesting, provide interpretive facilities, and identify opportunities for interesting photographs.
- Design a variety of scenic or similar walks, with colorful names and signs to trace the routes. (Boston's famous "Freedom Trail" is an example of an interesting and educational trail used extensively by both residents and nonresidents.)

- Prepare brochures describing pathways and points of interest, and distribute them at central locations in the communities, as well as on public vehicles used by tourists (such as the State ferries).

Away from the cities, there are similar needs for better identification of the wide range of interesting attractions available (as noted in the earlier discussion of nature study) and for the provision of interpretive facilities.

DRIVING FOR PLEASURE

The requirements of driving for pleasure are perhaps the most difficult of all to identify and to plan for, because roadways are rarely built to serve recreation purposes alone, and because driving for pleasure is only one of many recreational pursuits related to roadways. In these other recreational pursuits, however, the roadway is not so much an element of supply as a means of access to the recreation area.

For the purposes of this chapter, an artificial distinction is made between needs created by driving for pleasure and needs relating to access, and the latter needs are covered in the part of Chapter VII which reviews the overall question of access.

Because Alaska's highways serve such a variety of uses, it has not been practical to quantify the supply available for driving for pleasure. Nevertheless, it must be recognized that the heavy volume of participation in this activity (the third most popular form of outdoor recreation in the State, with 73 per cent of the resident population participating, and an overall per capita participation rate of 23.6 days annually) has helped to impose substantial pressures on the State's roadway system.

One alternative which has been suggested to help meet this need, and to accommodate the 30 per cent increase in driving for pleasure expected between now and 1975, is a scenic roadways program. This approach would involve developing new roadways primarily to serve recreational needs, as well as beautifying existing highways, and enhancing their recreational value through the provision of additional vista points, picnic areas, and similar facilities. In conjunction with a recommendation made by the National Recreation Advisory Council, the Alaska Department of Highways made a study of potential scenic roads in 1964. This study identified 34 potential scenic routes, which are listed in the separate volume of Appendixes. Unfortunately, the recommended program never materialized.

With or without a scenic roadways program, there is a growing need for additional turnoffs and waysides along the State's existing highways, for brief rest stops at interesting scenic, historic or similar locations, for overnight camping, and for access points into back-country areas. The State has had the beginnings of such a system for some years, and saw prospects for a substantial increase in the number of these areas as part of the Highway Beautification Program, which provided for reasonable control of junkyards as well as additional scenic overlooks and safety rest areas. Unfortunately, lack of funds brought this program nearly to a halt after only 38 new rest areas and viewpoints had been built.

As noted in the Cresap, McCormick and Paget report on tourism (cited earlier), there is also a high-priority need for the development of relatively short sections of highway where major attractions can be opened up and made much more accessible - for example, the proposed roadway across Turnagain Arm, another connecting the Seward and Sterling highways, and one in the Hatcher Pass - Independence Mine area, all three of which substantially improve recreational access.

At very moderate cost, there is also an opportunity to make the present highway system more interesting and enjoyable for those who drive for pleasure by capitalizing to a greater extent on the natural or historical attributes of the highways. For example, a number of the State's highways were developed from, or are near, trails which played a key role in the early history of the State. Such highways might be given more colorful names, and interesting interpretive facilities might be added along the route, not only to make the drive more enjoyable but also to publicize it to residents and tourists.

Finally, there is a continuing need for coordination between the Department of Highways and recreation planners to maximize esthetic and recreational considerations, to the extent practical, in modifying existing roads and in routing and designing all new highways. As has already been noted, the part of Chapter VII that deals with access contains further discussion of highways and other roads.

PICNICKING

Picnicking, defined as a meal out of doors anywhere except at home, is a highly popular form of recreation in Alaska which frequently occurs as an adjunct to other activities such as fishing, sightseeing, or nature study. Heavy participation occurs not only on trips, vacations and outings, where picnickers use either formal facilities or the natural environment, but also as a neighborhood activity, such as a picnic in the local park.

Thus, not all picnicking occasions require formal facilities; in fact, many people feel that a proper picnic calls for spreading out a blanket or sitting on the ground. Accordingly, this plan assumes that formal facilities (such as those itemized earlier in Exhibit VI-1) are required for only 25 per cent of all neighborhood picnics and 75 per cent of all picnics which occur on trips, outings and vacations. If these assumptions are valid, it appears that the number of picnic sites in Alaska should be more than doubled to meet the demand projected for 1975. Somewhat surprising is the fact that the greatest need for additional sites is not in South Central Alaska, the State's population center, but in Southeastern and Interior Alaska where, as shown in the table below, the present supply of picnic areas is quite limited:

<u>Region</u>	<u>1968 Supply (Units)</u>	<u>Additional Needs To 1975 (Units)</u>
Southeastern	197	1,085
South Central	2,525	669
Southwestern	10	329
Interior	157	981
Northwestern	-	212
Statewide	2,889	3,276

Beyond 1975, needs for picnic units will continue to rise sharply to a total requirement (present supply plus needed additions) for 7,337 units in 1980 and 13,736 units in the year 2000.

Because a large part of picnicking participation (47 per cent) occurs as a neighborhood activity, heavy pressures will be placed upon borough and community governments to meet these needs.

Moreover, data from "Alaska Campers 1964" bear out the fact that picnicking is frequently an adjunct to other recreational activities: picnickers frequently go in for fishing, hunting, hiking, swimming or boating when on a picnic. The improvements suggested for future picnic sites should include the provision of additional opportunities for these activities, and additional picnic facilities should be provided at sites which already offer these other kinds of recreation opportunities.

This same survey also indicated that both residents and nonresidents believe that picnic areas should have toilets, rain shelters, and supplies of firewood. However, by far the most urgently desired amenity was a supply of potable water: three times as many people cited this as any of the other possible improvements mentioned above.

FISHING, BOATING AND HUNTING

Although fishing, boating and hunting are distinctly separate activities, they have been brought together in this discussion for two reasons.

First, all three have in common an abundance of the basic unit of supply - land and water areas. The resources are so abundant, in fact, that it is not practical to attempt to measure them. Further, in the case of hunting and fishing, even though complete statistics on numbers of fish and game are not available, the existing data indicate that, with a few exceptions, there are no significant pressures which could diminish the supply. Thus, Alaska does not have the problems of some other states, where much of the land is private property and closed to public use, or game animals and fish are in short supply.

The second, and perhaps more important, reason for grouping these three activities for discussion is that the principal factor limiting present and increased future participation in all these activities is access facilities - primarily roadways, although launching ramps are also a constraint in the case of boating and fishing. While continued development of vehicles, such as the snowmobile, which need not depend on formal transportation systems may change this situation markedly in coming years, the present pressures on easily accessible lakes, streams and hunting areas are very great - perhaps as great as those experienced in relatively crowded parts of many other states.

Thus, for all three activities, the principal need in the immediate future is for improved access, and the heavy "neighborhood" participation rates for these activities suggest that greatest emphasis should be placed on the development of roadways, short landing strips and launching ramps within one to one-and-one-half hours' driving or flying time from major population centers. A great many Alaskans enjoy going directly from work, on one of Alaska's long summer days, to enjoy several hours of fishing, boating or (to a lesser extent) hunting, and still be home in time for a good night's sleep. Improved access to relatively nearby areas would be a boon to these people.

The need for launching facilities, moorage spaces and slips deserves special attention. Because information on the use of these facilities was not available from the survey of resident and nonresident demand, standards for these facilities could not be developed for this plan. However, future needs can be very roughly estimated by projecting strictly on the basis of forecast growth in participation for boating and fishing. Pertinent statistics are provided in the table below:

Region	1968 Supply		Expected Increase In Total		
	Launching Ramps	Slips And Moorings	Boating And Fishing Participation(a)		
			1967-1975	1967-1980	1967-2000
Southeastern	21	2,267	24%	62%	191%
South Central	57	950	44	77	263
Southwestern	-	1	24	38	106
Interior	29	3	30	53	155
Northwestern	-	-	28	48	148
Statewide	107	3,221	32%	62%	198%

(a)Arithmetic average of expected increases in boating and fishing.

In other words, if sufficient launching facilities are now available to meet present needs, the future need for additional facilities is proportional to the expected increases in boating and fishing participation. The assumption that existing supplies are sufficient for present levels of participation may underestimate present demands, but the application of one standard used by two Federal agencies suggests that the assumption may be approximately true. Both the Corps of Engineers and the Federal Power Commission use a standard of one ramp for every 40,000 annual visitors. According to this standard, when applied to sample data concerning resident and nonresident participation in fishing and boating, Alaska should have had 123 launching ramps in 1967-68 - just 16 more than were inventoried.

Thus, on the basis of present ramp, slip and mooring facilities and the forecast growth in boating and fishing participation, the following estimate of additional needs to 1975 has been developed:

Region	Additional Needs To 1975	
	Launching Ramps	Slips And Moorings
Southeastern	5	544
South Central	25	418
Southwestern	6	12
Interior	9	1
Northwestern	6	6
Statewide	51	981

Beyond 1975, there is an estimated need for 32 additional ramps and 1,041 additional slips and moorings in the five years to 1980. By the year 2000, 67 additional ramps and 1,574 slips and moorings will be needed.

CAMPING

Camping has been separated into two categories for planning purposes: camping in developed areas, and camping in remote areas.

Camping In Developed Areas

As shown in the table below, the public and private sectors will need to provide nearly 6,000 additional campsites (some of which could be in the form of cabins or group camping areas) by 1975:

<u>Region</u>	<u>1968 Supply (Units)</u>	<u>Additional Needs To 1975 (Units)</u>
Southeastern	545	371
South Central	2,190	3,522
Southwestern	57	635
Interior	828	1,169
Northwestern	<u>6</u>	<u>271</u>
Statewide	3,626	5,968

This is an increase over the present supply of approximately 165 per cent. The magnitude of this need implies that existing facilities are not meeting present demands, and indeed data from the 1964 survey of campers and from current reports by Parks and Recreation Section personnel support this observation. Existing facilities frequently are overcrowded, forcing many people to camp alongside the road.

Beyond 1975, the need for camping facilities is expected to increase still further, with 8,405 additional units required by 1980 and 27,379 additional units by the year 2000:

<u>Region</u>	<u>Additional Needs (Units) Beyond Present Supply</u>	
	<u>To 1980</u>	<u>To 2000</u>
Southeastern	648	2,365
South Central	4,963	17,289
Southwestern	773	1,438
Interior	1,695	5,601
Northwestern	<u>326</u>	<u>686</u>
Statewide	8,405	27,379

Meeting these needs will be a major challenge to Alaska's public and private sectors, not only because of their sheer magnitude but also because they come at a time when maintenance funds are generally in such short supply that there is some question whether even the existing facilities can be maintained at acceptable levels.

Thus, a concentrated effort by both the public and the private sectors will be required. The need is particularly imperative from the standpoint of tourism development, in view of present and forecast shortages of other types of accommodations (such as hotels and motels), plus the fact that camping is the preferred form of overnight accommodation for many of these visitors.

Moreover, merely providing a place to open a tent or to park a camper will not be sufficient to meet the demands. The previously mentioned survey of campers showed quite clearly that both resident and nonresident campers want and expect additional related facilities. Like picnickers, the campers who were surveyed urgently desire a supply of potable water, and many also feel that showers, firewood, rain shelters and toilets should be provided.

It should be pointed out, however, that residents differ somewhat from nonresidents in the types of facilities they desire. Resident Alaskans appear to prefer a somewhat more primitive type of facility, more spread out, with natural surroundings. Nonresidents, perhaps because of their experiences in other western states and the generally higher price structure they encounter in Alaska, expect relatively sophisticated facilities and services - flush-type toilets, laundry facilities, and camping spaces located close together both for security and for sociability.

In addition, it is expected that a demand will begin to be felt for tent-cabin camps, such as those which were proposed in the Cresap, McCormick and Paget survey of tourism and which are now found in the Grand Teton and Yosemite National Parks. In these tent-cabin camps, tourists who have not brought their own camping equipment (such as vacationers who fly to Alaska) can rent the necessary camping facilities and equipment. Such a facility is particularly desirable for younger tourists who have the money to fly to Alaska and rent the equipment but have too limited vacation time to drive or take a ferry to the State.

Results of the survey of campers also indicated that campgrounds should continue to be located near areas which offer opportunities for other forms of recreation. Both residents and nonresidents enjoy fishing, hunting, hiking, swimming, boating, and (to a lesser extent) activities such as rock collecting and berry picking while camping. When asked what additional opportunities they would like in the campgrounds, many people were satisfied with things as they are now, but those who did see an opportunity for improvement frequently mentioned such things as beach development and swimming pools, hiking opportunities, and playgrounds.

In terms of location, respondents to the survey of campers generally felt that the present spacing of approximately one campground every 40 miles of highway and a maximum spread of 70 miles were satisfactory.

Camping In Remote Areas

The previous comments have focused upon the need for developed campsites, or equivalent group camping sites for trailer and tent campers using roads as a means of access. Undeveloped or remote camping needs are also important.

As the classification itself implies, however, the need in this activity is primarily for improved trail systems, remote landing strips, and related forms of access to permit campers to get into the back country. These needs have been discussed previously, and are also covered in the parts of Chapter VII which discuss access and trails.

SWIMMING

Alaska has substantial swimming needs to meet in the coming years, in terms of both pool areas and beach areas.

Pool Areas

The needs for indoor/outdoor or indoor pool areas are shown in the table below:

<u>Region</u>	<u>1968 Supply (Square Feet)</u>	<u>Additional Needs To 1975 (Square Feet)</u>
Southeastern	3,375	27,600
South Central	10,800	17,200
Southwestern	-	4,000
Interior	6,300	6,700
Northwestern	-	<u>5,000</u>
Statewide	20,475	60,500

These estimates are considered somewhat conservative, since 13,500 square feet of the existing 20,475 are on military reservations where use by the general public is prohibited unless they are guests of military personnel.

Using 5,000 square feet per pool as a guide (the size of pool proposed in 1966 for Anchorage by the city's Parks and Recreation Department), the estimated needs can be expressed as roughly six pools in the Southeastern Region,

three in the South Central Region, and one each in the Southwestern, Interior, and Northwestern Regions. The needs in Southwestern and Northwestern Alaska deserve special consideration, however, because the indicated demand for pools is for all residents of these regions, while the distances in each region would limit the actual use of a pool almost exclusively to residents of a particular community. Moreover, continuing maintenance costs would be a substantial burden on many of the communities if they were required to fund the maintenance. It probably will not be feasible to meet these needs until such time as regional high schools may be developed.

Projected growth rates indicate that the needs for pools in Alaska will grow by 65 per cent between now and 1980, and 240 per cent between now and the year 2000.

The concept of an indoor/outdoor pool complex is suggested, both because it can be used over a much greater part of the year (with greater benefit from the cost) and because this type of facility is eligible for matching monies from the Land and Water Conservation Fund (whereas an indoor pool is not). Additional discussion of this and other uses of Land and Water Conservation Fund grants is provided as part of the next chapter.

Beach Areas

The requirements for additional developed swimming areas and beaches on the ocean and at lakes, ponds or streams are similar to those described for pools. Any visit to developed areas, such as Goose Lake in Anchorage, on a warm summer Saturday or Sunday will attest to these needs. In terms of front feet of beach area, the needs are substantial, with the greatest need (more than half the State total) in the South Central Region:

<u>Region</u>	<u>1968 Supply (Front Feet)</u>	<u>Additional Needs To 1975 (Front Feet)</u>
Southeastern	425	3,074
South Central	2,440	10,260
Southwestern	200	2,000
Interior	965	2,634
Northwestern	-	500
Statewide	4,030	18,468

These estimates are based on the assumption that developed beach areas should be provided for one-half of all ocean, lake, pond and stream swimming.

In addition to the total of 22,498 front feet shown above as needed by 1975, rising demands will call for 4,900 more feet by 1980 and 33,600 by the year 2000.

The pattern of present use, with approximately one-half the reported participation occurring as a neighborhood activity, indicates that pressures will be greatest for beach developments close to communities, such as the Sandy Beach Recreation Area now under development at Douglas in Southeastern Alaska, which will serve many residents in the Greater Juneau area.

OUTDOOR GAMES
AND SPORTS

Discussion of the needs associated with outdoor games and sports has been subdivided into games and sports areas, golf courses, and tennis courts.

Games And Sports Areas

On the basis of a standard of three acres per 1,000 population for developed games and sports areas (such as playgrounds, turf sports fields, courts etc.), Alaska now has enough such areas to meet approximately 75 per cent of present estimated needs. It should be noted, however, that this estimate is somewhat conservative, in that it does not take into account a minimum standard of two acres for every community.

While the present supply provides an overall surplus in the Interior Region, substantial needs are indicated in the Northwestern and Southwestern Regions:

<u>Region</u>	<u>1968 Supply (Acres)</u>	<u>Additional Needs To 1975 (Acres)</u>
Southeastern	104	49
South Central	312	216
Southwestern	19	74
Interior	167	7
Northwestern	<u>2</u>	<u>43</u>
Statewide	604	389

As the table shows, 389 additional acres will be needed by 1975. Beyond that time, another 497 acres will be needed by 1980, and 1,091 more acres by the year 2000.

The most practical way of providing these areas may be to develop them as elements of a park/school complex, wherein each primary, junior high or high school is provided with sufficient acreage and funds to develop facilities which will serve not only its students but also all residents of the surrounding area. This possibility is discussed further in Chapter VII, in connection with Alaska's urban recreation needs.

Golf Courses

Alaska now has three golf courses, totaling 36 holes, located in South Central and Interior Alaska. This total does not include the so called "million dollar" no-grass golf course located on gold mine tailings near Juneau in Southeastern Alaska, nor two proposed golf courses near Anchorage (the 9-hole public course at Russian Jack Springs, and the 18-hole military course at Elmendorf Air Force Base). The present total of 36 holes, however, tends to overstate the amount of facilities available to the general public, since two of the courses (27 of the 36 holes) are located on military reservations.

Survey statistics on participation and latent demand strongly suggest that many Alaskans yearn to enjoy the links much more than is possible at present. On the basis of those statistics, the following needs and forecast costs to 1975 have been developed:

<u>Region</u>	<u>1968 Supply (Holes)</u>	<u>Additional Needs To 1975 (Holes)</u>
Southeastern	-	9
South Central	27	27
Southwestern	-	-
Interior	9	18
Northwestern	-	-
Statewide	36	54

It should be pointed out that the need for 27 holes in South Central Alaska will not be satisfied by the 9-hole Russian Jack Springs course and the 18-hole Elmendorf course, since the Elmendorf course will not be open to the general public. Thus, 18 additional holes, available to all residents, are needed by 1975. Beyond 1975, there will be need for 18 more holes in Southeastern Alaska, 144 in South Central Alaska, and 54 in the Interior Region, by the year 2000.

Because the golfing season in Alaska is relatively short compared with the season in many other states, the economics of operation make it unlikely that unsubsidized private ownership would be feasible, except as part of a recreation complex offering other facilities, as an element in real estate land

development, or some similar arrangement. Thus, the needs will probably have to be met (either directly or through assistance to private enterprise) by community or borough governments, with possible State provision at such developments as the Nancy Lake State Recreation Area. Concessionaire operation of publicly provided facilities is one worthwhile approach to providing needed golf courses, while at the same time encouraging private enterprise development.

In order to achieve year-round utilization of these proposed golf courses, it is suggested that public courses be opened to snowmobiling or other winter sports during the off season.

Tennis Courts

The additional tennis courts needed by 1975 are shown in the table below:

<u>Region</u>	<u>1968 Supply (Courts)</u>	<u>Additional Needs To 1975 (Courts)</u>
Southeastern	2	14
South Central	27	13
Southwestern	-	4
Interior	14	-
Northwestern	-	-
Statewide	43	31

The need centers for the most part in South Central and Southeastern Alaska, and will be greatest in the urban areas. The bulk of the responsibility thus will fall to the local governments, which may provide the facilities in community parks and as parts of school playgrounds.

Beyond 1975, 14 additional courts will be needed by 1980, and 82 more by the year 2000, for a total of approximately 170 tennis courts at that time.

For these tennis courts, as for the golf courses, it is urged that year-round use (with attendant increases in utilization per dollar of cost) be designed to the extent practical, either by constructing them so that they can be flooded for winter use as ice skating rinks (a major need in Alaska's urban areas), or by providing a cover in the off season which will enable tennis players to use them earlier in the spring and later into the fall.

ICE SKATING

Ice skating is an activity for which Alaska has a tremendous advantage in natural environment. With the emphasis that ice skating is receiving in the schools, it seems likely that Alaskans may soon begin to challenge the long dominance of professional hockey by Canadians.

Two types of developed areas and facilities will be needed to meet Alaska's future demands, as defined in the design standards. The first is the formal facility involving a hockey rink, a speed skating oval, and similar areas. The second is a more natural area with only minimum development, such as car parking spaces, latrines, and a warm-up hut. For this plan, it is assumed that one or the other of these two types of developed areas should be provided to accommodate 90 per cent of the demand for ice skating, with the remaining 10 per cent being satisfied by undeveloped areas. The resulting estimate of needs to 1975 is shown below:

<u>Region</u>	<u>1968 Supply (Acres)</u>	<u>Additional Needs To 1975 (Acres)</u>
Southeastern	-	7
South Central	18	30
Southwestern	-	17
Interior	3	1
Northwestern	-	4
Statewide	21	59

Beyond 1975, 15 additional acres of developed skating area will be needed by 1980, and 60 more acres by the year 2000.

As was indicated in the previous discussion of tennis courts, there is an opportunity to design future courts (where practical) so that they can be easily flooded during winter months for conversion into hockey rinks, speed skating ovals, and general skating areas. Because approximately 97 per cent of reported ice skating occurs as a neighborhood activity, such an approach should be quite helpful in providing additional close-in skating opportunities in locations where ponds and streams are not available, while reducing the overall cost of meeting outdoor recreation needs through combined use of facilities.

SNOW PLAY

Alaska's natural environment for snow play activities such as tobogganing and sledding is nearly unlimited. The main requirement for these activities is to make certain that slopes are set aside in recreation reserves in urban communities and in rural communities where future growth might lead to the loss of the best sliding hills.

Snow play activities such as luge (a modified bobsled event) and ski jumping require special facilities designed according to international standards. In the future, there are likely to be needs for more ski jumps and formal luge facilities throughout the State, but sufficient data are not available for a specific determination of these needs at this time.

FLYING FOR PLEASURE

With flying for pleasure, as with such other combined recreation/access activities as driving for pleasure and motorcycling, there are difficulties in estimating recreational needs, since a great many flights are made in conjunction with other recreational and nonrecreational activities such as business, hunting or fishing. Accurate determination of needs is further complicated by the lack of any practical means of measuring the adequacy of the present supply - beyond inventorying present landing fields and bodies of water capable of handling float planes.

Opportunities do exist, however, for enhancing the recreational experiences of flyers. For example, new or emergency landing fields should be located near lakes or streams or similar recreational areas, to the extent that this is possible, so that the fields can serve simultaneously as both transportation and recreation facilities. A second opportunity involves the development of campsites, hiking trails and similar facilities near remote but popular fields. Additional recreation airstrips may also be developed, similar to the four now provided by the Forest Service and the Department of Fish and Game near Yakutat, and all large recreation areas (such as the Nancy Lake or Captain Cook Recreation Areas) should incorporate the provision of landing strips as one element of the overall development plan. All of these approaches can enhance the flyer's enjoyment of his sport while providing improved access to back-country areas.

ALPINE SKIING

Determination of Alaska's alpine skiing needs also presents some difficulties for the planner, primarily because the acre, the measure of capacity most frequently used in developing standards, is not as much of a constraint on skiing opportunities as the mechanical lift. Unfortunately, standards based upon lift capacity suffer from a number of limitations, since the speed and length of lifts may vary widely.

In estimating the needs for this activity, it was assumed that 90 per cent of the demand requires developed areas, as defined in the design standard. An acreage standard was then developed and applied, with the following results:

<u>Region</u>	<u>1968 Supply (Acres)</u>	<u>Additional Needs To 1975 (Acres)</u>
Southeastern	6	62
South Central	958	-
Southwestern	-	37
Interior	800	-
Northwestern	-	<u>45</u>
Statewide	1, 764	145

This table indicates that Alaska's future needs for alpine skiing are large, but (surprisingly) that the current supply in South Central and Interior Alaska is adequate to meet resident demands through 1975. While this may be true in terms of the acreage of ski slope available for skiing, current reports from resident skiers in these regions indicate that there is certainly no surplus lift capacity.

Accordingly, to obtain a different and perhaps more accurate picture of what is needed, an analysis of chair lift capacity by region was undertaken, using the assumption that three runs per hour is an approximate measure of slope capacity when short runs (such as the one at Russian Jack Springs) are combined with long runs (such as those found at Alyeska). In other words, the assumption is that the number of persons the average slope can handle at one time is approximately equal to hourly capacity divided by three. This assumption requires verification. However, the results of applying it, as shown in the following table, agree closely with estimates of need provided by two persons knowledgeable in this area who were interviewed in conjunction with this planning effort:

<u>Region</u>	<u>1968 Supply (Acres)</u>	<u>Additional Needs To 1975 (Acres)</u>
Southeastern	6	34
South Central	958	110
Southwestern	-	37
Interior	800	-
Northwestern	-	<u>45</u>
Statewide	1, 764	226

Forecasts of the needs for developed ski areas in 1980 and the year 2000 suggest that an additional 495 developed acres beyond the 1967 supply will be required by 1980, and 1,633 acres more than the 1967 supply by the year 2000. More detail on needs by region can be found in the separate volume of Appendixes.

If the assumption regarding three runs per hour is essentially valid, there is clearly a substantial need in South Central Alaska for an additional developed ski area - but only if that area includes mechanical lift capacity. In both of the preceding tables, needs are indicated for developed areas in Southeastern, Southwestern and Northwestern Alaska.

In Southeastern Alaska, it is hoped that the facility now planned for Fish Creek near Juneau can meet the bulk of the needs generated around the Greater Juneau Borough during the next five years.

In the two outlying regions, provision of expensive facilities is likely to be impractical because of the lack of population concentrations. However, rope tows, perhaps provided by quasi-public groups or the public sector, might be a practical approach.

Finally, it should be recognized that these estimates of needs may be somewhat conservative, since they do not reflect the potential increases in participation that may result from further promotion of Alaskan skiing areas to nonresidents. Should this nonresident demand begin to materialize as a significant element in overall participation, needs would have to be adjusted upward.

C - SUMMARY

This brief summary highlights some of the major conclusions to be drawn from the material presented in Section B.

Between now and 1975, there will be a substantial need for additions to the present supply of developed areas and facilities for outdoor recreation, as indicated by Exhibit VI-3, on the following page. The magnitude of the additional need typically ranges from 50 per cent to 300 per cent of the present supply.

It should be noted, however, that opportunities for the development of joint facilities for a number of recreational activities may help to reduce overall needs and corresponding costs. For example, most trails can be designed for use by one activity in the summer and another in the winter (such as hiking and snowmobiling). Similarly, tennis courts may be designed so that they can be flooded during the winter for ice skating.

Particularly large needs beyond the present supply are projected for bicycle paths, hiking and horseback riding trails, developed campsites, ice skating areas, and swimming pools and developed beaches. Of major importance will be the provision of developed camping areas throughout the State, not only because of the substantial need but also because these campsites constitute a major means of accommodation for many tourists. Thus, a shortage of developed campsites represents a bottleneck which may to some extent inhibit the growth of Alaska's tourism industry.

Because Alaskan residents are able to enjoy on a daily basis many forms of outdoor recreation which are available to people in more crowded parts of the country only on trips, outings and vacations, the needs for additional facilities are particularly heavy in and near urban centers, where high levels of participation are now reported (typically, 45 to 75 per cent of all participation occurs as daily or neighborhood participation).

In addition to the needs for developed areas and facilities as summarized in Exhibit VI-3, there will be requirements for related developments that are not so easily quantified. For example, new campgrounds and picnic areas will need to be located where they will afford opportunities for related types of recreation, such as hiking, fishing, swimming, and outdoor games and sports. Moreover, additional features should be provided at most developed sites, such as sanitation facilities, rain shelters, firewood, and potable water.

Joint access/recreation facilities (roadways, trails, airstrips, etc.) will also deserve special attention, since the present shortage of these facilities directly inhibits such recreational activities as driving or flying for pleasure, and indirectly affects other activities by limiting access. As discussed further in Chapter VII, improved access is a mandatory first step toward reducing the crowding now experienced at many developed areas.

Finally, there is a need for the improvement - and better promotion - of existing areas and facilities, notably those associated with sightseeing, walking for pleasure, and nature study. Particularly in and near urban areas, features of interest both to residents and to visitors should be identified, improved where necessary, and promoted and interpreted, perhaps as elements of historical routes, scenic drives, nature trails, and the like.

PRESENT SUPPLY OF RECREATIONAL RESOURCES, AND
ADDITIONAL NEEDS TO 1975

<u>Facility</u>	<u>Present Supply</u>	<u>Additional Needs By 1975</u>	<u>Additional Needs As Per Cent Of Present Supply</u>
Trails (Miles)			
Bicycle	4	257	6,425%
Hiking	761	516	68
Snowmobile	359	317	88
Canoe	399	227	57
Horseback riding	111	200	180
Cross-country skiing	317	21	7
Picnicking Areas (Units)	2,889	3,276	113
Fishing And Boating			
Ramps	107	51	48
Slips and moorings	3,221	981	30
Developed Campsites (Units)	3,626	5,968	165
Swimming			
Pools (square feet)	20,475	60,500	295
Developed beach (front feet)	4,030	18,468	458
Outdoor Games And Sports			
Games and sports areas (acres)	604	389	64
Golf (holes)	36	54	150
Tennis (courts)	43	31	72
Ice Skating Areas (Acres)	520	60	281
Developed Alpine Skiing Areas (Acres)	1,764	226	13

Chapter VII

RELATED AREAS OF SPECIAL NEEDS



Sailing in Southeastern Alaska

VII - RELATED AREAS OF SPECIAL NEED

In addition to the acquisition and development needs associated with the major forms of outdoor recreational activity in Alaska, there are important needs, not specifically related to individual activities, to which increasing attention must be given in the coming years. They are discussed in this chapter, which is divided into three sections:

- A - Natural Environment And Access Needs - which deals with requirements for protecting some of Alaska's finest natural features and developing improved means of access to recreational areas
- B - Specific Challenges And Opportunities - which covers a number of other important issues requiring special attention in the immediate future
- C - Organization And Policy Needs - which discusses important organization and policy matters that will substantially affect the extent to which Alaska is successful in meeting the recreation challenges of the coming years.

A - NATURAL ENVIRONMENT AND ACCESS NEEDS

Beyond the needs for providing developed areas and facilities, as identified in Chapter VI, there is need in Alaska to dedicate natural environment areas and features, such as urban open space, wilderness areas, and wild rivers and streams. In addition, there is need to expand and improve the access system which enables residents and nonresidents to get to these natural areas as well as to developed sites that are some distance away from major urban centers.

The material in this section is presented under seven headings:

- Urban natural areas
- Wilderness

- Wild and scenic rivers and streams
- Wildlife management
- Logging operations in Southeastern Alaska
- Access
- Trails and trail markers.

URBAN
NATURAL
AREAS

The previous chapter identified, activity by activity, Alaska's needs for developed areas and facilities. These needs, however, are only part of the overall requirement for recreational space and facilities. Natural or comparatively undeveloped land areas are also needed, especially near and within Alaska's cities.

Natural settings improve the esthetic value of crowded urban areas, and preserve the individuality of communities which otherwise tend to become more and more standardized as commercial and residential areas develop and grow. They can also help to reduce the clamor and congestion of urban life, while providing attractive natural settings for trail-related activities, sightseeing, and passive forms of recreation.

Two basic kinds of areas are proposed to meet Alaska's needs for natural environment in urban areas: open space, and park/school recreation complexes.

Open space, such as Anchorage's 400-acre Chester Creek Green Belt, can be defined as parts of park areas and green belts retained primarily in a natural state, with only minimum recreational development (such as trail access) permitted. A standard of 10 acres of undeveloped open space per 1,000 population should be adopted in Alaska for every metropolitan area with more than 1,000 residents (developed recreation areas and facilities might be located adjacent to these undeveloped areas). While reliable estimates of present open space acreage are not available, the application of this standard indicates the following regional and Statewide needs:

<u>Region</u>	<u>Total Acres Needed</u>
Southeastern	310
South Central	1,210
Southwestern	30
Interior	450
Northwestern	<u>50</u>
Statewide	2,050

Because open space is most urgently needed near the middle of urban areas, the costs of purchasing land could be quite high. Two alternative approaches may help to reduce these costs. Flood plain zoning of land subject to periodic flooding is one way to provide undeveloped recreational space while at the same time minimizing loss and damage from flooding. A number of flood plain studies useful for such zoning have already been completed in Alaska by the Corps of Engineers. Another approach to providing open space is to use the land selection powers of the State or the boroughs to dedicate valuable tracts of open land, thus avoiding major acquisition costs at a later date.

The second type of area proposed to meet Alaska's needs for natural environment in urban areas involves the concept of a park/school recreation complex, to provide both intensive use and natural environment areas. This concept envisions the development of a basic core of parks in areas adjacent to a community's elementary, junior high and senior high schools - an approach that not only offers economies of development and maintenance but may also provide for more balanced use of recreation areas over the period of a week, as facilities used for education during the weekday are converted to family and other resident use in the evenings and on weekends. Further, such a system can help to ensure good locations for community parks, with each park generally providing benefits to the same service radius as the school - that is, smaller parks for the more closely spaced elementary schools, and larger complexes, serving a wide population area, adjacent to the senior high schools.

Preliminary studies by the Parks and Recreation Section of Alaska's Division of Lands, based upon standards prepared by the American Association of Health, Physical Education and Recreation, have resulted in the following general acreage guidelines for these combination school/parks:

<u>Basic Type</u>	<u>Acreage Required</u>			
	<u>Buildings And Access</u>	<u>Intensive Use Recreation Area</u>	<u>General Recreation And Natural Area</u>	<u>Total Complex</u>
Primary (Grades 1-6)	3	7	25	35
Junior High (Grades 7-8 Or 7-9)	5	15	50	70
Senior High (Grades 9-12 Or 10-12)	10	30	100	140

These general guidelines would be scaled up or down according to school size, since small schools in outlying areas probably would not need acreages as large as those shown in the table, while the larger urban schools and regional high schools might well need even greater acreages than those shown.

Selection of large recreation tracts near all schools would be a means not only of acquiring land which would be used immediately by students for educational and recreational purposes but also of preserving natural environment areas as the surrounding community develops and expands.

Detailed regional statistics on elementary, junior high and senior high schools were not available for this planning effort, and thus, neither were estimates of existing acreage. However, a Statewide tally of such schools provides the basis for estimating total needs of approximately 20,000 acres of natural area adjacent to the schools of Alaska.

The preceding estimates of urban natural areas are based on existing population and existing schools; they do not reflect the needs for natural areas in 1975. Therefore, it is recommended that State parks and recreation planners work with borough and community planners to project future population growth and school additions, so that the natural area standards given here may be applied to future needs.

An alternative approach that should be considered is the calculation of needed natural area as a percentage of the total size of the urbanized area, rather than on the basis of population. Such an environment-based standard for urban planning would balance the developed area standards used in the preceding chapter, which were based on participation in the various recreation activities.

Although throughout the State the vast majority of land is publicly owned, this is not so in most of the growing urban areas. Therefore, most of the remaining public land in the urban areas should be reserved for public purposes, including open space and natural areas. In addition, State and borough land selection and classification represent ways of acquiring the needed space at relatively low cost. Where a deficit of public land is foreseen, private land should be acquired as soon as possible before rising land value or development of the land makes the provision of urban open space exorbitantly expensive or impossible.

WILDERNESS

As pointed out in Chapter IV, Alaska has no formally designated Wilderness Areas, although the U. S. Forest Service, the National Park Service and the U. S. Fish and Wildlife Service have initiated studies to evaluate potential Wilderness Areas on land under their control. In addition, the Alaska Wilderness Council, a private group, has organized itself to study and collect information on potential Wilderness Areas, and the Bureau of Land Management considers "primitive area" designation (an equivalent of Wilderness Area) as one possible land use in its unit resource analysis.

The subject of preserving wilderness is fundamental to planning for recreation and conservation in Alaska. To those who wish to preserve (to quote from the Wilderness Act) "areas where earth and its community of life are untrammelled by man, where man is a visitor and does not remain," it is appalling that the State where this concept could be most fruitfully applied has no formally designated and protected Wilderness Area.

This issue is quite a heated one, with conservation groups both within and outside Alaska militating for quick action to preserve lands. At the same time, others, more inclined to a development viewpoint, cannot abide a so-called "lockup" philosophy which prevents economic exploitation of what may prove to be highly productive portions of the State's millions of acres of primitive area.

Thus, it is clear that studies of potential Wilderness Areas should be conducted and completed as soon as possible, perhaps in conjunction with other resource inventories and development plans, in order to identify the truly unique areas that should be preserved and protected before the pace of development forecloses the opportunity. These areas, if they can be retained, will see increasing use by both residents and nonresidents as the scarcity of primitive and natural environment areas in other parts of the country makes them increasingly valuable.

In addition to keeping abreast of (and, where possible, assisting in) studies by the U. S. Forest Service, the National Park Service and the Federal Bureau of Sport Fisheries and Wildlife, as well as the Bureau of Land Management's unit resource analyses of its vast holdings, the State should maintain a close liaison with the Alaska Wilderness Council, perhaps through its Parks and Recreation Section - and, depending on future State land selections, should evaluate potential wilderness areas on State lands.

When all of the requisite studies have been completed, the potential areas can then be compared, and those most valuable nominated for protection through Congressional action or (in the case of BLM lands) "primitive area" designation. One guideline that was suggested to the Planning Task Force might be helpful in this evaluation and selection process - namely, that one Wilderness Area (or primitive area) of at least 300,000 to 500,000 acres be designated for each of Alaska's 15 physiographic provinces. By region, these provinces are:

- Region I (Southeastern Alaska)
 - Southeastern Alaska
 - St. Elias Range

- Region II (South Central Alaska)
 - Chugach-Kenai Mountains
 - Wrangell Mountains
 - Copper River Plateau
 - Talkeetna Mountains
 - Susitna - Cook Inlet Lowland
 - Alaska Range

- Region III (Southwestern Alaska)
 - Alaska Peninsula and Aleutian Islands

- Region IV (Interior Alaska)
 - Lowlands and Plains
 - Highlands

- Region V (Northwestern Alaska)
 - Seward Peninsula
 - Brooks Range
 - Foothills
 - Coastal Plain.

While this approach would very likely provide geographic balance in the designation of Wilderness Areas, the importance of the quality of the areas selected would no doubt necessitate some modification of the basic guideline.

WILD AND SCENIC
RIVERS AND STREAMS

As has been noted earlier, Congress in 1968 established a National System of Wild and Scenic Rivers, to preserve certain rivers in their free-flowing condition with (quoting from the act) "their immediate environments protected for the benefit and enjoyment of present and future generations." As defined by the Act (PL 90-542), three types of wild and scenic river systems may be designated:

"(1) Wild river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

"(2) Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

"(3) Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

While no rivers in Alaska were designated for inclusion in the initial system, the Bureau of Land Management has identified 61 rivers with potential on BLM land for further study regarding designation. The Bureau of Outdoor Recreation (for the Department of the Interior) and the U. S. Forest Service (for the Department of Agriculture) will coordinate studies of wild and scenic rivers. In addition, rivers on State lands should be evaluated for their potential as recreational corridors.

While the need for studies in this area is not as great as the need for studies concerned with trails, historic preservation and wilderness, it is hoped that a private group can be encouraged to assist the various land management agencies in preliminary studies. Perhaps the Territorial Sportsmen or the Sierra Club in Alaska could be encouraged to work on this project. Then, when funds become available at a later date, less work will be required to complete the analysis and to develop appropriate recommendations.

WILDLIFE MANAGEMENT

A number of related needs pertain to the environment for wildlife in Alaska. Perhaps most important is the need to provide, to the extent practical, areas in which residents and tourists can see and enjoy game in its natural habitat. For the visitor, this is an important part of his image of Alaska. It would be extremely unfortunate if economic development or excessive hunting were to limit the opportunity to view wild game to those few who have the time and the money to visit the relatively inaccessible back country.

Three approaches might provide the preservation of opportunities to view wild game. The first is the development of additional game reserve areas, managed and protected by the State, like the Brown Bear Sanctuary on McNeil River and the Walrus Islands Sanctuary in Bristol Bay. Additional game reserves located adjacent to major means of access (such as highways, railroads, airports and ferry terminals), with foot trails leading into the interiors of these reserves, would afford opportunities for a large segment of the public to view wildlife in a natural setting.

A second approach involves the development of large, enclosed game-viewing areas of approximately 1,500 acres. These viewing areas would make it comparatively easy to observe wildlife and thereby guarantee the visiting tourist an opportunity to experience at first hand Alaska's famous abundance of game. A disadvantage to this approach, however, is the intrusion of the fence on the natural setting: the viewing of wild game from behind fences may not enhance the image of Alaska. Another objection, from a game management point of view, is that the enclosed game population might get out of balance with the habitat.

A third approach is the establishment of wildlife management areas wherein it would be recognized that the wildlife is the critical resource but - unlike the previous two approaches - other compatible activities would be allowed to take place.

All three of these approaches should be evaluated by wildlife management, land management, and tourist industry representatives.

Another important matter is the need to ensure protection for endangered species of wildlife, such as the Aleutian Canada goose, together with the related issue of hunting techniques which involve the use of aircraft and snowmobiles to track game. Both considerations are complex, and unfortunately tend to be surrounded by a great deal of emotional controversy. This makes it essential that the game management specialists, who are acknowledged experts in these matters, work quickly while maintaining as close a liaison as possible with private groups during the study and resolution of the issues.

LOGGING OPERATIONS IN SOUTHEASTERN ALASKA

Much of the land area in Southeastern Alaska is covered by timber stands having commercial value, and large-scale logging operations can be expected in the near future. It is important that cutting be done in a manner to minimize adverse impact in areas having high recreational value, such as along roads, streams, and freshwater and saltwater shorelines. This is made difficult by the susceptibility of narrow "leave" strips of timber to wind damage, the difficulty of slash disposal, and other factors.

Areas having high recreational value should be a primary consideration when locating timber sales and access roads. Methods should be developed to preserve environmental quality along shorelines (particularly ferry lanes), other areas having high value for recreation, and recreational access roads.

ACCESS

The provision of additional and improved access by roadways, waterways and airways to more of Alaska's vast land area is seen by many people as the most fundamental recreational need to be met in the coming years, since the present shortage of good, low-cost access systems is the major constraint upon participation in many popular activities. As mentioned previously, it is ironic that the nation's largest state in land area, with an abundance of recreational resources and with an unusually low overall density of population, should frequently experience crowding on a par with comparable areas in more thickly populated states.

The principal element of the problem is the high cost of building and maintaining roadways in Alaska. Construction costs vary significantly within the State, depending upon terrain and climate, ranging from \$100,000 to \$1,000,000 per mile, with the average approximating \$200,000 per mile. Annual maintenance costs run \$1,000 to \$4,000 per mile.

The magnitude of these costs becomes clearer if they are related to those for other kinds of recreational areas and facilities. For example, it is estimated that something less than \$45 million would be required to meet all of the recreational needs to 1975 that were identified in the previous chapter. This same \$45 million, if applied to the construction of paved highways, would provide only about 225 miles of roadway, or slightly more than a 3 per cent increase in the present highway system of approximately 7,000 miles.

Thus, while the requirement for improved recreational access will continue to grow, with corresponding pressures for additional roadways, costs will tend to constrain their development primarily to those opportunities for roadways that can be made to serve a number of purposes in addition to recreation, such as improved connection between population centers, the opening of rich resource areas, and the development of commerce.

As identified in the study, "Alaska Recreation And Government Policies," prepared for the Federal Field Committee, the staged construction of development roads (fully engineered but unpaved secondary roads) to areas with both recreational and mineral resources is one possible way of enlarging the system of access at reduced cost, since use of this approach would save paving costs of \$30,000 to \$50,000 per mile. Mining, oil and fire access roads, as well as those developed by the U. S. Forest Service for logging, all offer additional opportunities to provide basic access to recreation areas at relatively low cost. Such access roads could open up substantial areas of recreational interest along or at the end points of present highway systems, thus offering an opportunity to reduce substantially the recreation pressures on the lands adjacent to existing systems at a cost much less than \$200,000 per mile.

However, the use of development roads as a means of recreation access will be successful only where the commercial and recreational uses are compatible. For example, access roads for logging and mining operations usually would be compatible with hunting access needs and motorized trail-related activities, whereas the scenic values sought in most types of nonmotorized trail-related activities or the quality of a unique natural area would be destroyed by logging or mining operations. Thus, the issue of recreation access is closely related to the issue of outdoor recreation zoning, which is discussed in Section B of this chapter.

As was noted in the previous chapter, there is a strong need to continue considering recreation as one of the primary uses of all new highways, and to locate and design highways so that, along with other uses, the roads can give the pleasure driver an interesting and scenic route (perhaps within a recreation corridor), the hunter or fisherman access to good game and fishing areas, and so forth.

The development of additional boat launching ramps and small boat harbors, and enlargement of the marine highway system, would lead to greater utilization of Alaska's saltwater sounds and fiords, and its freshwater lakes and streams, as access routes to vast areas of the State. The construction of remote airplane landing strips would provide access to areas not on the water and highway routes, and would serve a population which makes extraordinary use of air transportation.

TRAILS AND TRAIL MARKERS

Results of the survey of demand and the analysis of recreation needs indicate a major need for trail development in Alaska, particularly in view of the high cost of other means of access. Trail-related activities also constitute by far the most popular form of recreation in the State, and offer tremendous opportunities for future development on an imaginative scale. An extensive system of trails would provide not only trail recreation (such as hiking and horseback riding) but also badly needed access to remote areas for other recreational pursuits (such as camping, fishing and hunting).

As discussed in Chapter IV, Congress has passed a National Trails System Act (Public Law 90-543, 1968) which established a program for National Recreation Trails and National Scenic Trails. This legislation also called for study of Alaska's Gold Rush Trails for possible inclusion in the National Trails System. Although exact definition of these trails is lacking, the latest sources available indicate that the following "Gold Rush Trails" should be studied:

- Valdez - Fort Egbert
- Goat Trail (McCarthy to the Klondike)
- Fort Gibbon - Fort Egbert (Tanana to Eagle)
- Fairbanks - Circle
- Fairbanks - Bettles
- Fairbanks - Nome Mail
- Fort Gibbon - Fort St. Michael
- Whittier - Iditarod
- Stampede - Wood River
- Chilkoot Trail (Dyea to Lake Bennett)
- White Pass Trail (Skagway to Lake Bennett)
- Dalton Trail (Haines to Dawson City).

In view of the popularity of trail-related activities, the variety of opportunities that exist, and the importance of trails as a form of access for both residents and visitors, it is hoped that the study of potential National Scenic Trails (currently planned) will be conducted in the near future. Moreover, consideration should be given at the State level to the development of an Alaska Trails System, building upon the National Trails System concept to provide a complete system of Alaskan trails. Such a State system might feature interesting and colorful trails which permit one to "Hike From The Gulf Of Alaska To The Arctic Ocean" or to "Hike The Game Trails Of Alaska," and should pay particular attention to the development of trail systems which provide a wide range of recreational opportunities near urban centers. Responsibility for the development of an Alaska Trails System might be placed with

the Parks and Recreation Section, which would be required to coordinate the plans of Federal agencies (such as the Bureau of Land Management), State agencies (such as the Department of Highways and the Department of Fish and Game), and local governments.

A closely related need is for the development of a uniform system of trail markers or symbols which can be used to mark all trails in Alaska. Common markers or symbols, perhaps in the form of large decals, could be added to existing markers, and would be important particularly for those trails which cross lands owned or administered by more than one government agency. Large signs with common symbols could be a valuable asset in terms of both convenience and safety, since confusion about where a trail goes, particularly in Alaska with its quick changes in weather conditions, could have tragic results. Symbols depicting the types of use permitted are necessary in order to separate incompatible trail activities (such as cross-country skiing and snowmobiling, or hiking and motorcycling). Coordination between sportsmen's organizations and appropriate Federal, State and local government agencies should be strongly encouraged.

B - SPECIFIC CHALLENGES AND OPPORTUNITIES

In addition to the needs for additional developed recreational areas and facilities (as discussed in Chapter VI), as well as undeveloped areas and improved means of access to all kinds of recreational areas (as discussed in the first section of this chapter), Alaska faces a number of related challenges and opportunities which warrant action or study over the coming five years. In the order of their discussion in this section, these include:

- Recreation in Alaska's cities and boroughs
- Special recreation needs of smaller communities
- Historic preservation
- Maintenance costs
- Youth Conservation Corps
- Outdoor recreation zoning
- Problems with public behavior
- Needs of the handicapped
- Tax relief for recreational rights-of-way.

RECREATION IN ALASKA'S CITIES AND BOROUGHES

In a speech before the Outdoor Recreation Institute of the Alaska Municipal League in October 1968, Mr. Fred Overly, Regional Director of the Bureau of Outdoor Recreation, stated:

"I call your attention to a specific problem in outdoor recreation - the need for the acquisition of lands near and within your metropolitan areas. In these areas, you have made the same mistakes that have been made in the lower 48. Not enough land was set aside for recreation when it was easily available. Take a close look at this need. To date, Alaska has only two land acquisition projects: Nancy Lake, and some minor acquisitions in Anchorage."

Mr. Overly's comments go to the root of a major recreation challenge facing many Alaskan communities today: meeting the very heavy demand for recreation areas and facilities near and within the communities.

As was pointed out in Chapter V, Alaskan residents are more active recreationists overall than the residents of many other states, and it is for this reason that the recreational demand is particularly heavy in and around urban centers. Through sound planning, it is hoped that communities will create needed recreational environments which will be increasingly valuable assets in the years to come.

With only limited resources available at the State level to provide technical assistance and funds for recreation areas and programs, it becomes doubly important for the local communities to tackle their own recreation needs. However, as discussed in Chapter IV, only two of Alaska's boroughs, Matanuska-Susitna and Greater Juneau, have recreation powers at this time, and only Juneau has a full-time recreation staff. Two other boroughs, Kodiak Island and Greater Anchorage, are currently developing recreation-related plans which will help them select and set aside valuable recreation areas for the day when they do have recreation powers and can provide the needed facilities. The Fairbanks North Star Borough Recreation Committee, a voluntary organization of recreation representatives from the public, quasi-public and private sectors, is doing similar preliminary but unofficial recreation planning for the North Star Borough.

At the city level, only a few communities - notably Anchorage, Fairbanks, Ketchikan, and Bethel - have full-time recreation departments, although a number of other communities employ seasonal personnel. Park areas maintained in those communities lacking such departments are typically administered by some element in the city government such as the public works department, or by local public service groups such as the Lions Club.

To assist more communities in planning to meet their future recreation needs, the State should seriously consider changing the Statutes, under Title 29, Municipal Corporations, to provide parks and recreation powers to all chartered cities and all boroughs. These municipalities should then establish parks and recreation departments. The statutory change would allow these cities and boroughs to submit proposals for Land and Water Conservation Fund monies to assist them in the development of their recreational areas and facilities.

Until such time as the Statutes can be changed, however, it will be especially important for boroughs to use their planning and land selection powers in tandem (as is being done in the Greater Anchorage Borough), to set aside lands for future recreational use even though funds may not be immediately available. Such an approach can help to ensure a high-quality

recreation environment in the future, at generally less cost than the alternative of later purchase of needed lands from private ownership after the choicest areas have already been lost.

In addition, communities located on land in the public domain can receive land grants, under the Recreation and Public Purposes Act, for property which will be used for these purposes, for the cost of a townsite survey or 30 per cent of the fair market value of the property, whichever is the lesser amount. Moreover, each major community (or borough) should consider the development of areawide recreation complexes, such as the Big Dipper complex in Fairbanks. It is felt that such complexes would become valuable assets, offering a broad variety of opportunities year-round for both indoor and outdoor recreation. This approach would be an economical means of developing land and might well permit the employment of full-time personnel to maintain the complex and provide guidance and policing services.

SPECIAL RECREATION NEEDS OF SMALLER COMMUNITIES

As was pointed out in Chapter III, Alaska's population is largely concentrated in the largest five to ten cities of the State. The balance of the population, however, is by no means evenly spread out over the land. Generally, these inhabitants are grouped in approximately 180 smaller towns, and bush communities of 50 to 600 people, with little of the rural dispersion experienced in earlier American frontiers where people tended to live on the land apart from their neighbors.

Moreover, many of these communities exist at a subsistence level, with the result that a large number of the residents regard as a livelihood activities such as fishing and hunting which others regard as recreation. Lack of enough income and time for mobility also tends to restrict these people from participating in the recreational pursuits available to the more affluent residents of Alaska. Nonetheless, as was indicated in Chapter V, bush residents have strong needs and desires for recreation, and deserve attention in future recreational development. At present, almost no recreation areas and facilities are provided in these areas.

Because of the small populations involved, it appears that these outlying areas frequently do not receive adequate attention in the political allocation of funds for recreational development, a situation further complicated by the status of land ownership in many of the communities (Federal ownership of most of the land inhibits the State from taking responsibility for recreational development, while the Federal agencies tend not to consider recreation assistance for small communities as one of their responsibilities). One result of this confusion and inaction is that representatives of these outlying regions do not fully support State recreation programs which will benefit only the residents of larger cities and boroughs.

Furthermore, second-, third-, and fourth-class cities do not have legal authority to spend public funds for outdoor recreation, and therefore cannot be granted financial assistance for recreational purposes from Federal or State funds, unless the Alaska Statutes are amended.

In planning to meet the needs of these communities, attention will have to be paid to their unique needs, which are not adequately identified by a survey of demand of the type conducted for this planning effort. A thorough study of the needs of bush communities, perhaps conducted jointly by the State's Parks and Recreation Section, the Department of Education, and the Bureau of Indian Affairs, is suggested as the proper means of clearly defining the recreational needs of outlying areas and planning to meet these needs.

One critical need, however, appears to deserve attention even before the results of such a study are received: the need to provide developed areas and facilities (such as playgrounds, skating rinks and ski trails) for the younger residents of these areas, since budgetary limitations have prevented the Bureau of Indian Affairs from providing such facilities.

In addition, there are opportunities in some areas to help residents develop skills and secure employment in fields related to recreation. One survey by the Bureau of Indian Affairs, for example, identified opportunities for greater use of Indians as guides, or assistants to guides, for the growing numbers of resident and nonresident hunters and fishermen. To take advantage of this opportunity, however, adequate training programs are badly needed.

HISTORIC PRESERVATION

Much of the evidence and flavor of Alaska's colorful history is being lost year by year with the passage of time and the actions of a few who see opportunities to profit from collecting and selling artifacts and curios relating to Alaska's history. There is a strong need for a great deal of work in the area of historic preservation, to take an inventory of present and potential historic areas and sites, and to develop a Statewide program for historic preservation.

At one time, it was hoped that the funding of a grant program under the 1966 National Historic Sites Act would provide major assistance in this regard. Unfortunately, however, the program has failed to receive appropriations at the authorized level, and it has not been possible to carry out the survey of historic sites originally envisioned. The \$20,000 authorized by the State Government for the matching program have not been used because of the lack of Federal funds.

While Alaska has adopted regulations covering the designation, use and excavation of historic and archeological sites, there is a strong feeling in many quarters that additional action must be taken in the near future to preserve such sites before general thoughtlessness or economic development impairs their worth. It has been reported that some antiquity sites are already being dug up to sell the artifacts to tourists.

The State's Division of Museums should add at least one professional staff member who can spend all or most of his time working in this area. In the absence of Federal matching funds, this staff specialist might work closely with, and draw upon the resources of, private groups and university specialists, such as the Alaska Historical Society and the History Departments of the University of Alaska and Alaska Methodist University. Such groups could provide invaluable service in helping to inventory existing and potential historical areas for future action, and in developing a phased plan of action for the day when additional Federal or State funds may be available.

MAINTENANCE COSTS

As was indicated in the discussion in Chapter VI of the needs for additional developed camping areas, Alaska faces a major challenge in providing adequate maintenance for many of its existing areas and facilities. The problem is particularly acute in Alaska because of high labor and material costs as well as the extreme seasonal variations in weather which complicate maintenance. This problem will become more serious in the near future because the need for maintenance monies (already in short supply) will climb rapidly as Alaska takes action to meet present and projected demands for recreation.

Capital improvement funds from the Land and Water Conservation Fund and from other Federal and State sources (especially in the aftermath of the 1964 earthquake) have provided many facilities in Alaska, but a generally tight economic situation and budget constraints have encouraged keeping maintenance allocations as low as possible while still meeting the terms specified by the Bureau of Outdoor Recreation for Land and Water Conservation Fund projects. As a result, facilities are deteriorating more quickly than they should, and may have to be replaced earlier. Total costs in such circumstances are quite likely to be higher, while users will have to put up with second-rate and poorly maintained facilities much of the time.

This situation may be eased somewhat when the financial demands of present military commitments taper off and funds can be redirected to other purposes. In addition, revenue-sharing programs may be developed by the Federal Government that would help the State and local governments with the maintenance of their facilities.

User fees, which are discussed in more detail in the separately bound plan of action, represent another way to help provide maintenance monies. The funds generated from these fees might be earmarked so that matching allocations can be made in the annual budgets of administering agencies. Moreover, the personnel who collect such fees might be assigned the responsibility of providing some policing and maintenance services.

In addition, it is hoped that the increasing affluence of Alaska generally, expected from development of its petroleum industry, may help to provide maintenance funds for both State and local governments when the fruits of this development begin to flow to the State.

Finally, there is the possibility of a Youth Conservation Corps, discussed below, which might provide maintenance services for Federal, State and local areas and facilities.

YOUTH CONSERVATION CORPS

One suggestion, made a number of times while this plan was being prepared, was that a Youth Conservation Corps be created in Alaska, as an organization not unlike the CCC of the depression era. Such an organization would meet two very important needs:

- The provision of training and employment for many young people while contributing to enhancement of the State's natural environment
- The development and maintenance of at least some part of present and future recreational areas and facilities.

This suggestion deserves special study at the State level, to determine its feasibility and to establish preliminary guidelines for such an organization. Such a study, which probably should be conducted by a task force appointed by the Governor, might first examine parallel proposals at the Federal level, such as the one now being developed in the United States Congress. In addition, the study would need to determine preliminary policies in such areas as age requirements, compensation, discipline, and location. Eligibility would also be a key question, particularly since two groups of resident (or nonresident) young people might be available to serve: the high school or college student, during vacations; and the high school graduate or dropout. Preliminary discussions of this concept with people interviewed as a part of this planning process have elicited highly favorable reactions.

OUTDOOR RECREATION ZONING

Unlike many other states, Alaska has the opportunity to develop a sound approach to recreation zoning before major conflicts arise. At this time, there are no immediate pressures to develop outdoor recreation zoning except in connection with the snowmobile. In the near term, however, it will be necessary to consider zoning or other regulations, particularly in and near urban centers, and the need will increase as potentially conflicting recreation activities become more popular, and as new vehicles are developed (like the snowmobile, air-cushion vehicles, and similar innovations) which release users from the normal constraints of formal access systems and afford entry to relatively untouched areas.

Special attention will have to be directed toward conflicts created by motorized recreation vehicles. The snowmobile, for example, is both a blessing and a bane. The vehicle has provided an entirely new form of recreation, has spread recreation demands over a broader area, and has offered lower-cost basic transportation to many Alaskans, who find snowmobiles cheaper to own and operate than dog teams. At the same time, the snowmobile is extremely noisy, chews up much of the natural beauty of the winter scenery, can ruin trails for other uses such as cross-country skiing or dogsledding, and can permit litter to be spread over much larger areas of the countryside. Similarly, motorcyclists can interfere with horseback riders, boaters may conflict with canoers, and so on.

Increasingly, professional recreation planners will feel the need to study conflicting demands and potentials for recreational areas, and to make decisions regarding optimum usage. In addition, they will have to determine methods of enforcing zoning - a difficult problem which may require them to seek substantial support from quasi-public groups if enforcement is to be feasible.

Wherever State or local agencies lack the powers to develop and enforce regulations on these matters, steps should be taken to obtain such powers. At the same time, existing and proposed recreation areas should be reexamined to determine whether zoning may be needed and what kinds of action may be required to reduce or avoid conflicts in use. Recreation planners should use the time available now, before major conflicts develop, to analyze and prepare sound zoning policies for the future.

PROBLEMS IN PUBLIC BEHAVIOR

Increasingly, Alaska is facing some of the same problems of vandalism, theft, and violation of rules in its recreation areas and facilities as are being experienced in other states. Reports indicate that city parks, cabins available to the general public, and similar recreational facilities are suffering from

abuse and vandalism. As would be expected, these problems are more severe near urban areas and at locations to which street or highway access is readily available. Facilities at some distance from cities and/or requiring special effort to reach are rarely bothered, but this could change as new motorized vehicles that need not be confined to the formal transportation systems become more popular.

There are no simple solutions, and only limited approaches appear to be practicable at this time. These include:

- Design of the facilities with possible misuse and vandalism in mind, to make such actions more difficult, the facilities themselves more durable, and the replacement of elements susceptible to vandalism easier
- Increased policing and improved regulations, such as those recently adopted for State Park areas and campgrounds
- Fees which might help to induce a more responsible attitude
- More on-site personnel, such as rangers, at places where the volume of users and the type of facilities justify this kind of attention (this possibility is discussed further in the separately bound plan of action, in connection with the subject of user and entrance fees).

NEEDS OF THE HANDICAPPED

Providing recreational benefits to people with mental and physical disabilities is also of major importance in Alaska, as it is in many other parts of the country. Handicapped people, though limited in some pursuits, have basically the same needs and desires for recreational opportunities as able-bodied persons. For these people, outdoor recreation not only provides physical conditioning and the enjoyment normally associated with recreational activity but also helps them develop a sense of independence and self-direction.

At present, only one camp, located at Kings Lake, exists to serve the needs of the handicapped in Alaska. This facility provides recreational opportunities for handicapped children during several weeks each year. The Anchorage Parks and Recreation Department also provides a valuable service to the handicapped by running a special arts and crafts program, and various Federal and State agencies attempt to design their facilities to enable handicapped people to participate in recreational activities.

Beyond these programs, however, there is continuing need for more attention to this area. Whenever practical, the design of recreation areas and facilities should take into account the needs of the handicapped. Sanitary facilities, for example, should be large, with doorways wide enough for wheelchairs and with support bars. Ramps should be provided adjacent to steps whenever practical, and recreation complexes should be designed to avoid requiring people to cross vehicular traffic in getting from one part of the complex (such as the picnic area) to another (such as the rest rooms). Facilities designed specifically for the handicapped should also be developed, such as fishing piers and trails. Furthermore, especially near the larger urban centers, local government programs should be developed to provide additional recreational outlets at locations as close as possible to where handicapped people live. The Parks and Recreation Section of the State Department of Natural Resources is interested in helping other agencies, upon request, in designing their areas and facilities around the needs of the handicapped. Among the special facilities that could be provided are:

- Fishing from piers, trails and boats
- Rifle ranges for practice shooting
- Archery ranges
- Swimming (depending on the kind and degree of disability)
- Canoeing and small boat sailing (with special precautions)
- Short scenic access trails for wheelchairs
- Parks with pleasant views and plenty of benches, close to community centers, ferry terminals, or small boat harbors.

For the elderly, passive recreation areas and short trails close to the centers of communities are also suggested.

Additional study of the recreation needs of the disabled in Alaska is needed, to learn more about their numbers, their locations, their specific types of disability, and their special needs. To this end, a special joint survey should be conducted by the Parks and Recreation Section and the Department of Health and Welfare, one feature of this study being an attempt to define responsibilities for promoting and coordinating recreation programs designed to meet the identified needs of the handicapped.

TAX RELIEF FOR
RECREATIONAL
RIGHTS-OF-WAY

During the interviews conducted in conjunction with this planning effort, it was suggested to the Planning Task Force that the State might wish to consider providing some form of tax relief to private property owners who permit recreational easements to State or local governments. Such a system may well become desirable, either to provide improved access to publicly owned recreation areas adjacent to the private properties, or to offer additional recreational opportunities on the private land itself, such as trails, or children's play areas on vacant lots.

A brief examination of this issue indicates that the problem is somewhat complex, because of the difficulty of assigning a value to the easement, and because of the variety of approaches to taxation taken by different communities. There is a need for a thorough study of the matter before any legislation is drafted for State or local government consideration. Such a study could perhaps draw upon a related analysis now being done by the Kenai Peninsula Borough, and should focus on determining the magnitude of potential benefits to the public sector as well as the cost of such a system to the State's taxpayers. Additional discussion of this possibility is provided in one section of the separately bound plan of action.

C - ORGANIZATION AND POLICY NEEDS

This section brings together and defines a number of important organization and policy issues, concerned with outdoor recreation in Alaska, which will have a major impact on the successful accomplishment of this plan. Recommendations are made regarding those matters felt by the Planning Task Force to be within the scope of its planning effort and its limited resources for thorough study and analysis. In some cases, however, only the identification of a basic issue has been attempted, since a number of these issues require substantial further study.

Taken as a whole, this section constitutes a review of several major policy issues currently confronting recreation leaders in Alaska, in the hope that it will help to define the issues and will provoke discussion toward their resolution. It is divided into four parts, covering the following topics:

- Commitment to recreation and conservation in Alaska
- Coordination of recreation-related agencies
- Alaska's organization for parks and recreation
- Federal appropriations, statutes and policies.

COMMITMENT TO RECREATION AND CONSERVATION IN ALASKA

Planning for recreation and conservation is a very complex and emotional issue in Alaska, and one which many people both inside and outside the State consider to be a fundamental challenge at this time. Perhaps the issue can best be summarized in terms of a series of interrelated questions:

- How do recreation and conservation fit into the overall scheme of things in Alaska - and, on a large scale, what is the overall scheme for this rapidly changing State?
- How can Alaska best avoid such problems, now facing many other states, as environmental pollution, urban sprawl, erosion of treasured natural environment, and incompatible economic development?

- What, if anything, should be done to promote recreation and conservation in a State which is undergoing transition from a remote frontier environment to a more accessible, dynamic and increasingly self-sufficient area?
- At what point might it become imperative to discard the assumption that Alaska has sufficient natural environment or primitive area so that a possible shortage need not be of concern, and to begin taking action to preserve valuable areas which are threatened or which will be needed for the future?

A cursory examination of this list reveals that these questions (to which many more could be added) involve fundamental matters of policy regarding Alaska's forward thinking, its planning efforts, and the goals or objectives established by the State's leadership. They are closely related to, but in some respects outside the scope of, a recreation plan such as this. For this reason, the comments made about them within this plan should be regarded as one important point of view to be considered within a broader context.

The Need To Plan For Recreation And Conservation

Alaska is just now beginning to feel the impact of economic and technological developments which could make it financially feasible for the State to develop and provide access to a unique and invaluable recreational environment; opportunities are becoming available on a scale not even considered possible a few years ago. At the same time, however, these developments could well impair or destroy much of the natural environment which constitutes the basis for recreational opportunities.

The primitive character of much of Alaska represents a national resource which many citizens both within and outside the State wish to see preserved to the maximum extent possible for present and future generations. This point of view is steadily being strengthened as residents of other parts of the country become increasingly concerned about the effects of pollution, crowding, slum areas, and other ever-worsening challenges to the natural environment. Moreover, rising incomes are giving growing numbers of people the kind of affluence which will permit them to visit and observe the Alaska they have heard so much about.

It is argued that commitment of the State's political leadership to this philosophy is essential to creating and retaining the desired kind of recreational environment, because major investments in a publicly supported recreation system are required if valuable natural resources are to be preserved during a period when a rapidly changing economy is encroaching upon them. In the absence of a commitment by the State's leadership, opportunities to protect the present resources and to create the desired environment will be lost by default.

The opportunities are great. Alaska could provide a recreational environment unique in the world, supporting its natural attributes with the necessary accommodation facilities and transportation systems to develop a dynamic tourism industry.

However, the challenges are also great. The petroleum industry, a benefactor to the State and perhaps indirectly to recreation, will almost certainly have a substantial impact on the State's natural environment. The ecology of Arctic Alaska is bound to be affected as men and equipment move into the area, build roads across the fragile tundra, extract gravel from streams and fish spawning areas, dispose of their human and industrial wastes, and begin to disrupt the subsistence patterns of bush residents who have historically depended upon fish and wildlife populations. The pipeline from Prudhoe Bay to Valdez will stretch across the State from top to bottom, and will create in scenic Prince William Sound a major port for oil being shipped to United States and world markets.

Various kinds of pollution are already a problem in Alaska: garbage is frequently dumped wherever convenient or into the State's waters; disposable beer and soft drink containers litter the areas adjacent to many of Alaska's highways; raw sewage from a growing population flows into rivers, streams and bays around the State; and rusting car bodies, oil drums and machinery dot the landscape.

The development of new types of vehicles which need not rely on formal transportation systems will also have substantial impact over the next 10 to 15 years, opening up extensive parts of the State, now relatively untouched, for hunting and fishing, camping and other forms of recreation. The enhanced recreational opportunities offered by these vehicles, however, will be accompanied by new problems, such as littering in areas hard to police, conflicts with other forms of recreation, impairment of the natural environment, and much easier poaching and illegal fishing.

Observations

Several broad observations appear to be pertinent to the previous discussion.

First, Alaska now has the potential to develop itself in a way, and on a scale, not even imagined just a few short years ago. It is genuinely exciting to contemplate the scope of this potential: while entering into a period of substantial economic growth, the State has an opportunity to retain and protect its natural beauty, its history and the unique aspects of its culture, and to develop a recreational environment unparalleled elsewhere in the world.

A program to accomplish this successfully will, in all probability, require the commitment of substantial funds beyond the capabilities of the private sector; very likely, some portion of the oil royalty revenues must be tapped. Even though tremendous pressures are already being exerted to use this money in other ways, its reinvestment in Alaskan conservation and recreational development has some very appealing aspects:

- On an economic basis, it represents an unusual kind of investment, in that the returns over time are nearly infinite since the resource will be enhanced rather than depleted, and will be able to attract people and dollars for an unlimited period into the future.
- Investment of the magnitude suggested in this plan (and in the 1968 survey of tourism by Cresap, McCormick and Paget) can provide the needed underpinnings for a vital and self-sufficient tourism industry.
- The development of tourism can help the State to diversify its economic base, so that it is not as heavily dependent upon extractive industries and the Federal Government.
- Because both tourism and recreation are generally labor-intensive service industries, they offer prospects for a substantial improvement in the State's unemployment rate.
- Moreover, the development of service industries related to tourism and recreation is an approach based upon one of Alaska's primary strengths - its natural environment.

As a second observation, Alaska can now afford to be selective in its economic development and to develop farsighted policies and regulations concerning its natural resources. For example, it can encourage or enforce the kind of compatible economic development characterized by: (1) the Snettisham Dam project, wherein underwater cables, rather than unsightly hanging power lines, will be used to transmit electric power approximately 28 miles from the dam itself up the scenic Inside Passage to a point near Juneau; and (2) the announced plans of three major oil companies to elevate their tremendous oil pipeline aboveground in parts of the Arctic, to facilitate migratory game movement and other access needs, and belowground through much of the rest of the State.

Strong antipollution laws can be adopted and enforced, together with incentives to encourage responsible corporate behavior. Littered areas can be cleaned up and improved access, designed to be compatible with recreation opportunities, can be further encouraged.

As a third observation, it is felt unlikely that the type of development discussed above will evolve naturally. It will require strong direction from the State's political leaders, and a concurrent commitment to coordinated planning. The State Government appears to be the most appropriate level for this kind of planning, and sound planning by a competent, multidisciplinary staff is the only feasible way to shape tomorrow's environment. The development of State goals and objectives, along the lines of the work now being undertaken by the Division of Planning and Research, will be important in establishing clear policies for all administrative agencies.

Similarly, resource evaluation and land selection and classification policies should be based upon farsighted goals that include consideration of recreation opportunities, while existing lands should be thoroughly evaluated (perhaps using a system similar to the Bureau of Land Management "unit resource analysis") in a manner that takes recreation into consideration as one element of their potential. The land use planning function should be expanded and upgraded within the State Government, and close liaison should be maintained among State, Federal, and local government land management agencies.

In addition, substantial financial assistance should be committed to the preservation of environmental quality in Alaska's cities, where the problems of pollution and lack of public open space are most acute.

Widespread appreciation of the many natural wonders of Alaska and public awareness of the threats to the environment will be necessary to generate adequate support for the actions required. Therefore, outdoor education should become an integral part of Alaska's public school curriculum, and all land management agencies should utilize imaginative communication methods to inform the public about the importance of the environment as one of the State's most valuable possessions.

It would be both ironic and tragic if the one State that has the time and the potential funds for careful development of its natural resources were to miss its opportunity and thereby fail to avoid the problems which have beset the other states.

COORDINATION OF RECREATION-RELATED AGENCIES

At present, Alaska lacks the kind of effective organization and the channels which are needed to provide coordinated direction to the public agencies, quasi-public groups and private operators closely involved with recreation in the State. The need to ensure such coordination and leadership is an old problem, which can be traced back as far as the ORRRC Study Report Number 9, published in 1962. This special report, which focused upon Alaska, identified a need for improved coordination of all recreation-related agencies.

Following the publication of this 1962 report, the Alaska Outdoor Recreation Council (AORC) was organized in 1964, as a Statewide body to bring together recreation specialists from Federal, State and local agencies, as well as interested private parties, to discuss common problems and to coordinate their actions. The AORC met once or twice each year, at various locations around the State, typically to review recent activities and future plans of the agencies represented. While this approach was a definite improvement over the strictly informal coordination which it replaced, it has not been entirely satisfactory, and the AORC has come under fire from a number of sources, including the study of Alaska recreation and government policies done for the Federal Field Committee as well as the AORC membership itself. Major problems of the AORC appear to have stemmed from the following circumstances:

- The AORC was strictly a voluntary organization, with no legal authority to establish policies in the area of recreation or to enforce decisions. As a result, the Council served only to facilitate communication, and was frequently criticized as a debating society.
- Because of the distances and the cost of travel in a State as large as Alaska, it was difficult to sustain high levels of attendance at each meeting, especially by the private sector representatives.
- Distinct regional variations in climate and terrain are so significant in Alaska that the problems and issues of interest to members in one region were frequently not of interest to members from another.
- The large number of agencies involved with recreation in Alaska, each with its own traditions and policies, together with the large number of individual personalities with different interests and backgrounds, appeared to prohibit the establishment of those common threads of understanding and interest which are necessary for the group to be effective. For most of the agencies, moreover, recreation is not a primary function.

Despite the problems noted above, it must be stressed that coordination has improved, as closer personal relationships have been developed through informal get-togethers to talk about recreation. Nevertheless, many persons interviewed during the preparation of this Plan indicated that State Government leadership in recreation (discussed previously) and coordination of recreation-related agencies are the two biggest problems currently facing Alaska in this area.

Because of these problems, the AORC formally reorganized itself in October 1968, creating an Executive Committee and three regional councils (Southeastern, South Central and Southwestern, and Interior and Northwestern). These changes are discussed more fully below.

A Modified Alaska Outdoor Recreation Council

The recent reorganization of the Alaska Outdoor Recreation Council involved establishing three regional councils, thus reducing the amount of travel required, permitting coordination on a more meaningful geographic basis, and allowing for more frequent meetings which might encourage better communication.

The reorganization also established an Executive Committee, made up of 10 members and chaired by the Secretary of State. Although final composition has not been determined, the approach to date has involved one Federal representative (the Federal Field Committee Chairman), one State representative (the Director of Planning and Research), one local government representative (the Executive Director of the Alaska Municipal League), one private representative (appointed by the Governor), and two members without vote (the Chief of the Parks and Recreation Section, and a representative from the Bureau of Outdoor Recreation). The heads of the three regional councils were also to be members of the Committee without vote. The Committee was to be responsible for: (1) overseeing the development of the Outdoor Recreation Plan, (2) developing recreation policies, and (3) screening requests for Land and Water Conservation Fund monies.

This approach has a number of important advantages. It places responsibility for leadership and coordination at the State level (through memberships on, as well as chairmanship of, the Executive Committee), with appropriate representation from the Federal Government, local governments and the private sector, as well as regional councils to meet and coordinate actions for more practical geographic segments. In particular, the approach clearly defines policy responsibility and places it on an important level in the State Government, by naming the Secretary of State as Chairman of the Executive Committee. It is hoped that this responsibility and authority would receive legal sanction through an act of the State legislature, but even without such sanction the members of the Executive Committee would appear to have a great deal of influence in encouraging conformance to Committee policies.

Moreover, the approach already has the acceptance and support of many of the State's recreation specialists because, as members of the original organization, they helped to create its successor.

There are, however, possible disadvantages as well. Because the regions are still very large geographic areas, the regional councils may begin to suffer from much the same problems of lack of participation and lack of purpose that characterized the old AORC. Greater participation and interest might be generated if the regional councils were replaced by subregional councils which could focus on recreation issues within smaller geographic areas (such as boroughs) and work closely with borough planning departments. In addition, because the Executive Committee is composed largely of members who are not recreation specialists and who have many other responsibilities, it could also suffer from lack of concerned leadership and participation.

Despite the limitations cited above, it is strongly urged that the new concept of organization for the AORC be implemented and then reexamined and reshaped if changes are appropriate.

In activating the Alaska Outdoor Recreation Council, it will be necessary to distinguish among the organization's various functions and to determine who should carry them out. The Executive Committee should consider the following assignments of responsibilities for advisory, coordination, and policy-making functions.

Advisory Function

It is extremely important for the agencies and enterprises which provide space and facilities for recreation to be sensitive to the many good ideas that may be elicited from members of the public who in fact participate in recreation. While the public has been welcome at all AORC meetings, publicity has been inadequate and only residents of the community where the meeting was being held could easily attend.

The regional or subregional recreation councils would be in a better position to give the recreationer opportunities to make his wishes known and to discuss recreation issues which concern his community. The recently organized Fairbanks Recreation Council is a good example of participation by the public and sportsmen's organizations in recreation planning.

Thus, the advisory function should be performed through discussion by the full AORC membership of the issues at the regional or subregional level, and through presentation of the resulting suggestions to the Statewide Executive Committee by the chairmen of the regional or subregional recreation councils.

Coordination And Implementation Function

Coordination of recreation programs is a function which has not been fully exercised to date but which is essential to successful implementation of the Alaska Outdoor Recreation Plan. One prerequisite for meeting the needs set forth in this Plan is close coordination of the recreation projects of the various public agencies and private groups in Alaska. The Executive Committee should be the authoritative body which allocates responsibilities for satisfying the recreation needs identified in this Plan. It also should propose any legislation at the Federal, State and local government levels which may be necessary to implement the Plan.

The staff of the Executive Committee, consisting of employees of the State Parks and Recreation agency, should be responsible for collecting the data needed for Executive Committee decisions. A more complete discussion of this concept is provided in Chapter III of Volume Three. In general, the concept involves splitting the overall Plan into more specific five-year regional and agency plans for implementation, with annual reports of progress measured against these five-year plans.

An important aspect of the coordination function is the allocation of Land and Water Conservation Fund monies among the project proposals submitted by State and local government agencies. At present, this function is the responsibility of the Governor's Advisory Committee, consisting of the Secretary of State, the Commissioner of Administration, and the State Liaison Officer for Land and Water Conservation Fund projects. It has been proposed that the Executive Committee of the AORC be made responsible for the allocation of funds for State and local government Land and Water Conservation Fund projects, as one of its coordination activities. Until the Executive Committee has the legal authority to accomplish this function, however, it will continue to be the responsibility of the Governor's Advisory Committee.

The information required for project evaluation will be collected by those employees in the State's Parks and Recreation agency who would serve as staff for the AORC Executive Committee. A discussion of guidelines for project evaluation is presented in Chapter III of Volume Three.

Recreation Resource Policy-Making Function

The Alaska Outdoor Recreation Council is the logical body to formulate policies concerning the recreation resources of Alaska. The Executive Committee should formulate recreation resource policy concerning those issues for which the AORC is the appropriate decision-making body, and should forward recommendations concerning other recreation-related issues to the appropriate agencies. In addition, the Executive Committee should present the recreation resource viewpoint to such planning bodies as the State Division

of Planning and Research in the Office of the Governor, and the Federal Field Committee for Development Planning in Alaska, whose role in Alaskan affairs should be greatly strengthened. More specifically, the recommendations made in this Plan should be submitted by the Executive Committee to the appropriate policy-making bodies for adoption or rejection.

Observations

A number of additional steps beyond mere reorganization appear desirable. First, if it is at all possible, legal sanction should be sought for the Executive Committee, so that it will have status equivalent to that of a commission, council or board, together with the authority to make and enforce State recreation responsibilities (within the limits of the Alaska Statutes) and to act as a review board for project proposals under the Land and Water Conservation Fund Act. This legal sanction would also enhance the prestige of the Executive Committee.

Second, it is suggested that strong encouragement for the reorganized AORC be provided through the Office of the Governor, with public acknowledgment of the new organization, early nomination of representatives from the private sector, support for a bill giving the Executive Committee and the regional or subregional councils legal sanction, and a formal public statement explaining the roles of these groups and their importance in providing Statewide recreation opportunities.

Third, the State Parks and Recreation agency should be assigned the necessary additional staff to enable it to support the Executive Committee of the AORC in coordinating the efforts of the various recreation-related agencies.

Fourth, the regional or subregional councils should take on a greater topical orientation. For example, each meeting might focus on a specific issue of interest to a majority of the membership, such as user fees, trail systems, recreation zoning, or any of a large number of other subjects which need additional study at this time. Speeches, papers, seminars or debates might be presented on various topics. Special subcommittees of the regional councils might be formed to investigate matters of special concern to a limited number of members or to report to the full council on matters of general interest. To add further substance to these councils, their elected leaders might be made voting members of the Executive Committee. Meetings might be moved to less formal surroundings, to encourage the informal exchange of comments after the meetings. These are but a few of the ideas that might be developed to make the regional councils more effective.

ALASKA'S ORGANIZATION FOR PARKS AND RECREATION

Closely related to the suggested means of improving recreation planning and coordination is the matter of the State's present and possible future organization for providing parks and recreation. The discussion below reviews the present organization and considers the need for modifications.

Background

The State of Alaska currently vests parks and recreation powers within a Parks and Recreation Section, one of six Sections within the Division of Lands, which in turn is one of four Divisions within the Department of Natural Resources. This structure is illustrated by Exhibit VII-1, on the following page.

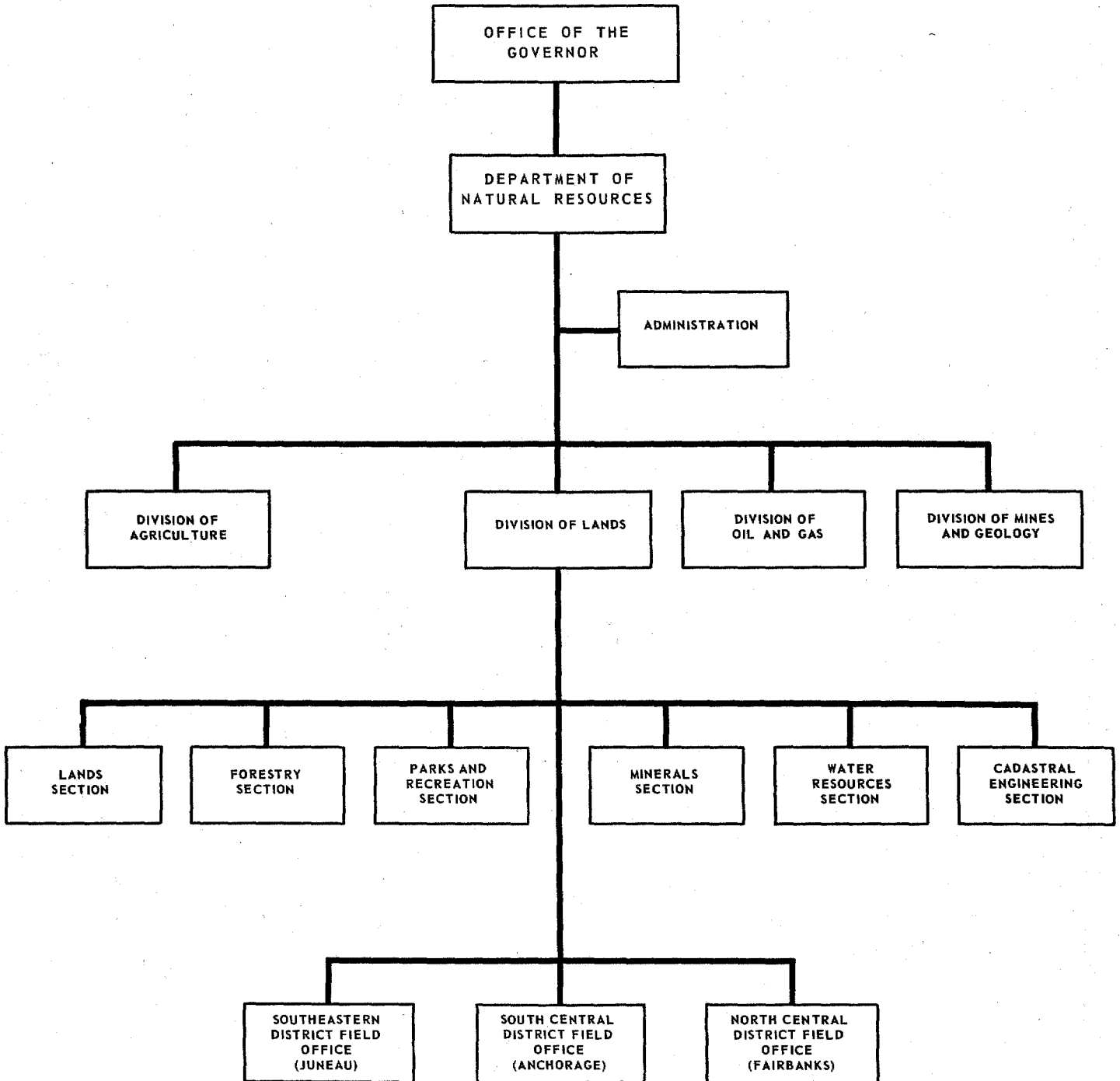
The Parks and Recreation Section (which was a subordinate element within the Branch of Forestry until 1966) has as basic responsibilities:

- Development of the State's Outdoor Recreation Plan
- Administration of Land and Water Conservation Fund projects
- Supervision of master planning and design of sites and facilities for State Parks and Recreation Areas
- Construction and upgrading of facilities, by contract and force account
- Operation and maintenance of all facilities
- Historic preservation, and operation of State historic sites.

The Parks and Recreation Section also provides technical assistance to other government units in projects such as the historical study of the Skagway area, development of a city park in Cordova, and consultation on parks and recreation developments in Soldotna.

Most of the Section's staff are currently located in Anchorage, with additional field personnel, devoting full- or part-time attention to parks and recreation, reporting through field offices directly to the Director of the Division of Lands. As indicated by the Director of the Division, however, the Parks and Recreation field staff are functionally responsible to the Chief of the Parks and Recreation Section.

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
BASIC ORGANIZATION OF THE DIVISION OF LANDS



Observations

While the Planning Task Force has only limited perspective on the overall organization of the State Government, the Department of Natural Resources and the Division of Lands, it appears that consideration should be given to eventual reorganization of the State's recreation functions, either through elevation of the Parks and Recreation Section to higher status within the Department, or through a regrouping of all recreation-related functions within a new unit of organization, such as a Department of Recreation and Tourism.

Such a change is not an urgent need, and in any event would involve detailed consideration of the important requirements for coordination between the Division of Lands and the various functions related to recreation. Nevertheless, this change will probably become highly desirable in the near future, for a number of reasons.

It is already recognized that recreation and tourism are becoming increasingly important to the State's economy, in terms of both resident and nonresident use of State-provided areas and facilities. The Cresap, McCormick and Paget study of tourism in 1968 pointed out that, as an industry, tourism represents the fourth largest segment of the State's economy, after wood products, food processing, and oil and gas, and that its growth, at roughly 17 per cent since 1964, is the second fastest of the basic industries. Parks and recreation are an important and inherent part of this industry, and in due time the State may wish to consider grouping together the now fragmented elements of government that are concerned with the industry - including, besides the Parks and Recreation Section, selected elements of the Department of Fish and Game, the Department of Public Works, and the Department of Highways. This general concept is now being examined in some other states where increasing attention is being devoted to the need for improved coordination of programs in the areas of recreation, conservation and tourism.

The functions of the Parks and Recreation Section will continue to expand in the near future, particularly as the needed capital improvements identified in this plan are provided, and as Land and Water Conservation Fund monies available for these projects increase to the new higher level of approximately \$900,000 a year.

In addition, it should be recognized that the position of Chief of the Parks and Recreation Section, as it is now constituted, involves a great deal of responsibility for leadership and coordination, as well as close working relationships with high levels in the State, Federal, local and private sectors. This plan itself is one example of the leadership role. The functions provided by the Parks and Recreation Section are rapidly

becoming more important to Alaska - indeed, more important than sectional organization status within one of the State's 57 divisions implies. While the existing form of organization is workable for now, it will soon be appropriate to provide additional status and authority commensurate with the growing importance of the job.

FEDERAL APPROPRIATIONS,
STATUTES AND POLICIES

The Bureau of Outdoor Recreation (BOR) provides invaluable services to every state through its research and special studies, the wide variety of assistance it provides, its encouragement of coordination and cooperation among agencies involved in recreation and - particularly - its administration of Land and Water Conservation Fund programs. Without question, the BOR is an agency with substantial impact on Alaska.

With the passage of the recent amendment to the Land and Water Conservation Fund Act (S 1401), it was hoped that the amount of the annual appropriation to the Fund would be stabilized at \$200 million, and that each state's allocation would also become relatively predictable, since this would enable a state to design much of its own program around the expected allocation. It appears, however, that while the Fund itself has been stabilized, individual appropriations have not, and the states remain in much the same position as before the amendment. While the effects of the present unusual circumstances of the nation's military commitments are recognized, it is hoped that future action can be taken to guarantee appropriations from the Fund at or near the authorized level. This would aid Alaska in developing a firmer schedule for capital improvements and sounder long-range planning.