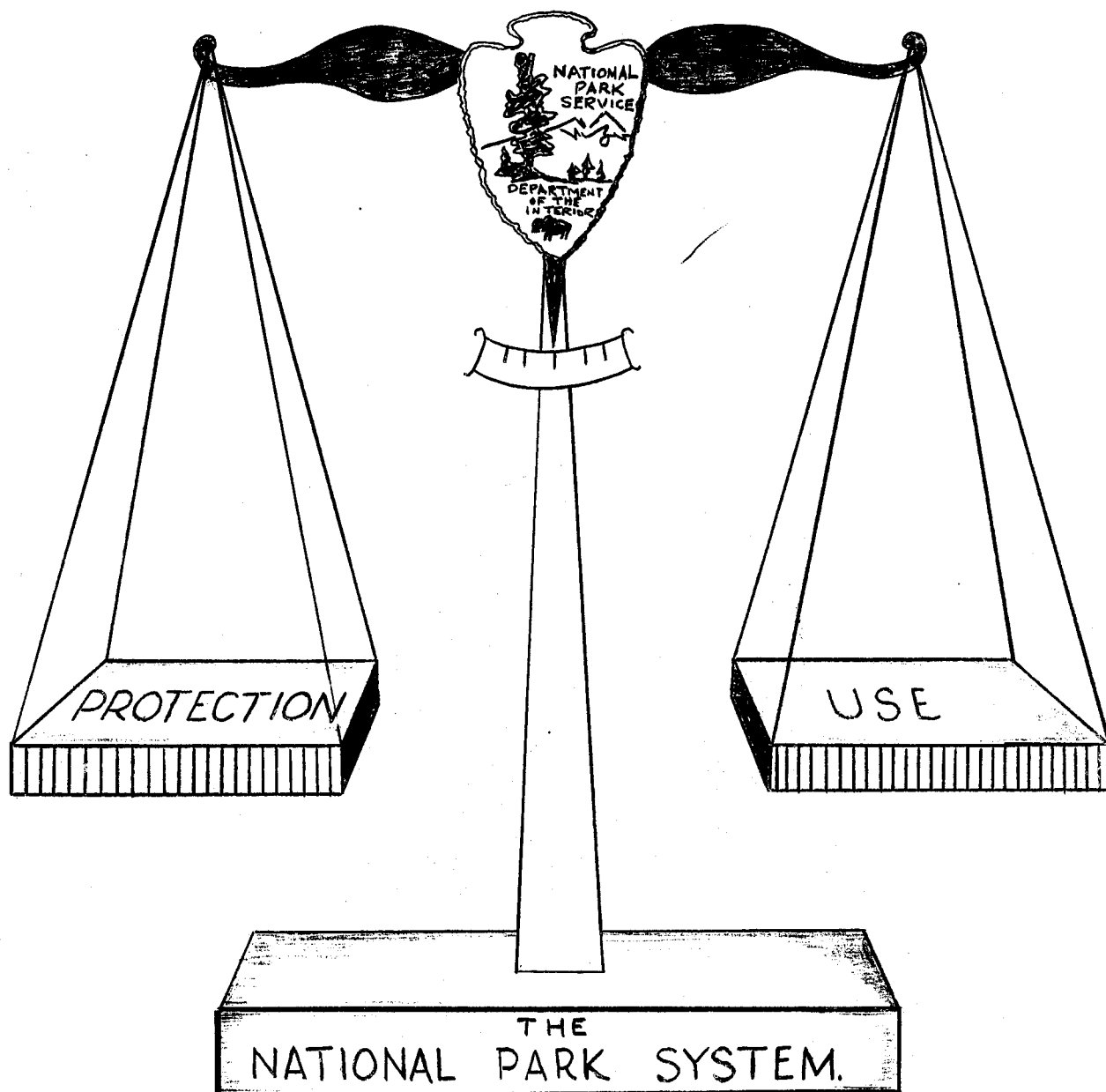


D-978

File: NPS (General)

MISSION 66 REPORT.

STOKES



SEPTEMBER 1955.

PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE

333.706
Na 2/3-1955

ON MICROFILM

MISSION 66

<u>CONTENTS</u>	<u>PAGE</u>
MISSION 66 -- Its Objectives - - - - -	1
Its Precepts - - - - -	3
RECOMMENDED PROGRAM	
I. CAPITAL OUTLAY - - - - -	9
A. CONSTRUCTION - - - - -	10
1. Parkways - - - - -	11
2. Roads and Trails - - - - -	12
3. Buildings, Utilities, and Other Facilities - -	13
4. Employee Housing - - - - -	15
5. Airports and Aviation - - - - -	18
B. LANDS AND WATER RIGHTS - - - - -	19
1. Land Acquisition - - - - -	19
2. Water Rights Acquisition - - - - -	21
II. CONCESSION FACILITIES - - - - -	22
III. ANNUAL OPERATING NEEDS - - - - -	23
A. STAFFING AND GENERAL ADMINISTRATION - - - - -	23
B. MANAGEMENT, PROTECTION, AND INTERPRETATION - - - -	25-a
1. Forestry and Fire Control - - - - -	26
(a) Forest Pest Control - - - - -	27
2. Soil and Moisture Conservation - - - - -	28
3. Signing - - - - -	29
4. Audio-Visual Services - - - - -	30
5. Publications - - - - -	31
C. MAINTENANCE AND OPERATION OF PHYSICAL FACILITIES - -	34
1. Roads, Trails, and Parkways - - - - -	35
2. Buildings, Utilities, and Other Facilities - -	36
3. Preservation of Historic and Scientific Collections - - - - -	37
D. PERSONNEL DEVELOPMENT AND TRAINING - - - - -	38

MISSION 66

<u>CONTENTS (CONTINUED)</u>	<u>PAGE</u>
IV. COOPERATIVE ACTIVITIES - - - - -	39
A. AREA INVESTIGATIONS - - - - -	40
1. Preparation of a National Park System Plan -	40
2. Completion of Comprehensive Boundary and Scientific Studies - - - - -	41
B. STATE COOPERATION PROGRAM - - - - -	42
C. RIVER BASIN STUDIES - - - - -	43
1. Preparation of a National Recreation Plan -	43
2. Reservoir Recreation Area Planning - - - - -	44
V. RESEARCH PROGRAMS - - - - -	45
A. WATER RESOURCES STUDIES - - - - -	45
B. HISTORIC SITES SURVEY - - - - -	46
C. HISTORIC AMERICAN BUILDINGS SURVEY - - - - -	47
D. ARCHEOLOGICAL SURVEY AND SALVAGE - - - - -	48
VI. LEGISLATION - - - - -	49
A. ROADS AND TRAILS, AND PARKWAYS - - - - -	49
B. BUILDINGS AND UTILITIES - - - - -	49
C. EMPLOYEE HOUSING - - - - -	50
D. AIRPORTS - - - - -	51
E. NON-FEDERAL LAND ACQUISITION - - - - -	51
F. LOANS TO CONCESSIONERS - - - - -	52

MISSION 66

Its Objectives

The increasing number of visitors to areas of the National Park System - 21 million in 1946 -- 50 million in 1955 - is gratifying evidence of the people's interest in their parks, of the continuing growth of a great Nation, and of the personal benefits its citizens are obtaining from an expanding economy and accompanying social and cultural progress. It also predicts an increasing volume of public use that can be expected in the years ahead.

But to those responsible for the management and protection of the parks there are sobering signs in the increasing use. Unfortunately, park development - the provision of those facilities and services necessary for visitor enjoyment, comfort and safety, and area protection - has not kept pace with expanding visitation. Already there are warning signs of the harmful effects of over-use. Travel to the parks has increased to the point of embarrassment while provisions for it and for better protection have been deferred because of lack of funds.

The Department of the Interior, Bureau of the Budget, and Congressional Committees have been aware of the needs, and have given them most careful consideration in the light of demands of the Federal Treasury for defense and related needs during the postwar years. The much welcomed increases in appropriations for seasonal interpretive and protective personnel and for maintenance during the past few years are a recognition of the needs. Gains have also been made in the program of acquiring privately owned lands and legislation designed to facilitate daily operations in the parks has been enacted.

There is a growing awareness by the public of the plight of the parks and the need for more recreational opportunities. Have the parks reached their full potential of public use? Shall limits be placed on the numbers of people using the parks, while denying others that same right? Can increasing use and protection be reconciled? These are some of the questions requiring an answer.

Recognizing its responsibility to the Nation, the National Park Service is attempting to find solutions to these many perplexing problems. The objective is to find solutions compatible with the intent of the Act of 1916 establishing the National Park Service, acceptable to the public, capable of accomplishment within reasonable limits of time and cost, and capable of accommodation without radical change to conditions still farther in the future. Pertinent to the solutions are studies of past experiences, present conditions, and needs of the future.

MISSION 66

This report is a preliminary result of that study. It proposes guides for future use and development of the parks. The findings have been translated into a course of action to correct present deficiencies and provide for future needs. The program presented herewith to provide for 80 million visitors by 1966 can be accomplished within a period of ten years.

MISSION 66

Its Precepts

1. ALL ACTIVITIES WITHIN ALL NATIONAL PARKS SHALL BE CONSISTENT WITH THE BASIC PURPOSES OF THE NATIONAL PARK SERVICE. THESE PURPOSES ARE:

TO CONSERVE the scenery and the natural and historic objects and the wildlife therein, and

TO PROVIDE FOR THE ENJOYMENT of the same in such manner and by such means as will

LEAVE THEM UNIMPAIRED for the enjoyment of future generations.

2. PRESERVATION OF PARK RESOURCES IS THE BASIC REQUIREMENT UNDERLYING ALL PARK MANAGEMENT.

DISCUSSION:

- A. The use and development program shall be directed toward achievement of the preservation objectives of the Service and improving the quality of visitor experience.
- B. Substantial public use, benefit and enjoyment remain the best means of protecting the parks from threats of adverse use, but to achieve specific protection goals, use must be controlled or guided. Proper development is often the best method to accomplish this control.

Examples of achieving protection objectives through proper development are the provision of boardwalks around the geyser formations in Yellowstone, and the paving of roads, parking areas and footpaths in Yosemite Valley, which have channeled visitor use.

- C. All visitors desiring to enter a national park may do so, but every visitor cannot be guaranteed overnight or meal facilities where existing within a park. Limitations on numbers admitted are not to be considered except for certain prehistoric and historic ruins or buildings which because of various inherent limitations require restrictions on the number of people who may safely pass over or through them at one time.
- D. To encourage increased visitation throughout the year or greater portions of the year, a positive program shall be followed to provide off-season use wherever the climate is suitable for such a program, and the visitor potential is sufficient to warrant staffing and development on that basis. This will increase opportunities for enjoyment of the parks, often with less impairment than results from visitor concentration in summer months.

MISSION 66

- E. The use of parks for organized events that result in abnormal concentrations of visitors and require facilities, services, and manpower over and above that required for normal park activities shall not be permitted unless they directly advance visitor's experience in keeping with the significance of the park.
3. VISITOR EXPERIENCES DERIVED FROM THE SIGNIFICANT VALUES OF A PARK ARE AN IMPORTANT GUIDE TO DEVELOPMENT.

DISCUSSION:

- A. Insofar as possible, the interpretive presentation should take full advantage of the actual scene, object, or structure as the interpretive exhibit. Roads and Trails, therefore, should be fully developed as an interpretive device.
4. THE PRIMARY FUNCTION OF INFORMATION AND INTERPRETIVE SERVICES IS TO HELP VISITORS ENJOY AN AREA, AND THROUGH UNDERSTANDING AND APPRECIATION, PROVIDE BETTER PROTECTION.

DISCUSSION:

- A. This program for an area shall make easily available to all visitors a general understanding of the basic values in the park, and the importance of park protection.
- B. The interpretive program shall take its theme from and give major emphasis to the primary resources of an area. Secondary and minor features shall be presented in their relationship to the major theme, rather than as a separate and self-contained theme.
- C. Personal services for large groups of people shall be augmented as required by interpretative and informational signs and markers in non-technical language, self-help facilities along roads and trails, entrance orientation stations, and various mechanical or automatic devices.
- D. A visitor use center may be desirable in most parks and historic sites, and in large parks with diverse interests, more than one such center may be required. This center should provide information and interpretation regarding the park's primary resources and should serve large numbers of people.
- E. The Service shall provide such training to its own employees as may be necessary to insure accuracy, adequacy, and good performance in all interpretation and information work, and shall cooperate with concessioners and others in a training program when such services are provided by their employees.

MISSION 66

5. CAMPING IS RECOGNIZED AS AN IMPORTANT ELEMENT OF THE PARK EXPERIENCE IN MANY AREAS, BUT IT IS NOT APPROPRIATE WITHIN ZONES OF MAJOR AND IMPORTANT FEATURES.

DISCUSSION:

- A. Where this situation exists, every effort will be directed toward relocation of camping on sites of lesser importance.
6. PICNIC GROUNDS WILL BE DEVELOPED IN AREAS WHERE PICNICKING IS AN IMPORTANT ELEMENT OF A VISITOR DAY USE PATTERN.

DISCUSSION:

- A. Where picnicking facilities are required as a part of a visitor day use pattern, such facilities may be provided but not within the zone of influence of the major and important features. Where this situation exists, picnic grounds will be relocated as rapidly as developments can be provided in more suitable locations.
- B. In historic areas, picnic facilities may be provided only when necessary as part of an adequate program for visitor appreciation of the great events commemorated in that area. Occasionally, time needed for a proper tour of the area requires some provision for a lunch stop. In those instances, lunch grounds would be a proper supplement to the interpretive program.
7. CONCESSION FACILITIES SHALL BE DEVELOPED IN THE PARKS ONLY WHEN NECESSARY FOR APPROPRIATE ENJOYMENT OF THE AREAS BY THE VISITING PUBLIC.

DISCUSSION:

- A. Whenever public accommodations in the immediate vicinity of a park are available or can be developed, this will obviate the provision of such facilities within a park.
- B. To the full extent feasible, competition in providing concession facilities shall be encouraged.
- C. The desirable objective is that any bus or commercial carrier may enter a park subject to payment of fees and compliance with park regulations, particularly those concerning length and weight limitations. Where preferential transportation franchises are necessary, these franchises should provide for entry under Service prescribed regulations, of taxis, drive-yourself-cars, buses chartered by organized groups, or buses on an extended tour where the park visit is incidental.

MISSION 66

8. PRESENT DEVELOPMENTS (GOVERNMENT OR CONCESSIONER) WHICH ENCROACH UPON IMPORTANT FEATURES OR STRATEGIC ZONES, OR WHERE CROWDING IS A PROBLEM, SHOULD BE ELIMINATED OR MOVED TO LESS STRATEGIC SITES WHICH WILL PERMIT REASONABLE ACCESS TO THE IMPORTANT FEATURES OF THE PARK.

DISCUSSION:

- A. In some instances it will be necessary to eliminate concession public facilities or remove them from within the zones of major and important features. The terms of existing contracts must be recognized.
- B. Where operational facilities (Government or Concessioner) are located within the zone of intensive public use of great natural or historical features, or at sites uneconomical to operate or maintain, such centers shall be moved to locations outside the park, or to more suitable locations within the park. Facilities of the following types should be considered under this classification:

Equipment and other storage buildings

Large warehouses

Shop activities of all types (automotive repair, carpentry, painting, etc.)

Most administrative functions (Administrative Offices, clerical offices, etc.)

Employee houses

9. THE BACK COUNTRY IS THE WILDERNESS OF THE PARKS. IT CONTAINS THE FEATURES, THE SPIRIT, THE ENVIRONMENT, FOR WILDERNESS EXPERIENCES. PRESERVATION OF THE INTEGRITY OF THE BACK COUNTRY IS PARAMOUNT.

DISCUSSION:

- A. Developments shall be restricted to facilities in keeping with wilderness experiences, and preservation of the environment.
10. THE NATIONAL PARK SERVICE SHOULD BE ALERT TO ALL DEVELOPMENTS IN THE FIELD OF TRAFFIC MANAGEMENT AND IMPROVED MEANS OF ACCESS AND CIRCULATION FOR THE NATIONAL PARKS. SUCH IMPROVEMENTS SHOULD BE ADOPTED FOR NATIONAL PARK USE WHENEVER APPROPRIATE.

MISSION 66

DISCUSSION:

- A. All forms of transportation having as their objective the use and enjoyment of the basic values of a park shall be given careful consideration.
 - B. The constant increase in demand for parking space for automobiles may, in some situations, require the development of multiple level parking ramps or something similar in lieu of surface parking.
 - C. The National Park Service airport policy should be strengthened and development of airports at sites adjacent to the park should be accomplished as promptly as possible. Contract authorization should be sought for this purpose.
11. THE PROBLEMS OF THE NATIONAL PARKS CANNOT BE ENTIRELY SOLVED WITHOUT COORDINATED PLANNING WHICH INCLUDES STATE AND LOCAL PARK SYSTEMS, AND THE RECREATIONAL USE OF OTHER STATE AND FEDERAL LANDS.

DISCUSSION:

- A. Cooperation in park planning with other Federal, State, and local governmental agencies shall be sought in order to reflect in our plans for the parks, their recreation plans and programs for adjacent and nearby areas.
12. EMPLOYEE HOUSING WITHIN THE PARKS SHALL BE PROVIDED WHEN NEEDED FOR PROTECTION AND OPERATION OF THE AREA OR WHEN THE REMOTENESS OF THE AREA MAKES SUCH HOUSING WITHIN THE PARKS NECESSARY.

DISCUSSION:

- A. Housing for government and concession employees when within the Park shall be concentrated and located out of public view, in a planned residential community.
 - B. In areas with administrative centers outside the Park, housing should be provided for those Government employees subject to the rotation policy, and seasonal employees.
13. THE PRESENT NATIONAL PARK SERVICE POLICIES FOR ELIMINATION AND EXCLUSION OF NON-CONFORMING USES SUCH AS GRAZING AND MINING AND ACQUISITION OF NON-FEDERAL LANDS WITHIN A PARK ARE RECONFIRMED.

MISSION 66

14. A SYSTEM OF EQUITABLE VISITOR FEES AND CHARGES WILL BE MAINTAINED FOR PARK FACILITIES AND SERVICES PROVIDED AT THE PUBLIC EXPENSE.

DISCUSSION:

- A. Consideration must be given to cost to the Government, value to the recipient, and public interest served, thereby reducing the burden on the general taxpayer.
- B. A single fee system as distinguished from a multiple fee system shall be used wherever feasible.

MISSION 66

I. CAPITAL OUTLAY

Proper development of the parks to meet an expected visitor load of 80,000,000 will require a rate of capital outlay substantially greater than at any time in the past, except during the depression years of the 'thirties, when large amounts of emergency relief funds were made available. The increase in visitor load is only part of the measure of the need, for many existing facilities are outworn and outmoded, and require replacement. The rate of capital outlay must be greatly accelerated, including new construction and replacement of buildings and utilities; completion of parkways, completion of park roads and trail systems; improvement of existing roads and trails to raise them to standards required by modern needs; provision of adequate employee housing; and the acquisition of lands and water rights within the areas. In addition to the outlay of Federal funds, it will be necessary to encourage and stimulate private capital to invest in needed hotels, restaurants, and other visitor accommodations and services.

Capital outlay estimated to be needed during the 10 year period 1957-1966 is summarized by classes as follows:

<u>Description</u>	<u>Amount</u>
Construction of roads, trails, parkways, buildings, airports, and utilities	\$ 413,500,000
Purchase of lands and water rights	<u>15,865,000</u>
Subtotal, Federal Appropriation	\$ 429,365,000
Private Capital:	
Investment in visitor housing, restaurants, and other visitor services	\$ 75,000,000
Donations for land acquisition on a match- ing basis	<u>5,000,000</u>
Subtotal, Private Capital	\$ 80,000,000
GRAND TOTAL	<u><u>\$ 509,365,000</u></u>

The foregoing estimates of needs are covered in more detail in succeeding pages of this report.

MISSION 66

A. CONSTRUCTION

GENERAL

When the annual programs for employee housing, buildings and utilities items, and roads and trails projects are prepared, greater emphasis than ever before must be placed upon their accomplishment in large increments, or what might be called a "package" basis. There are many reasons for this. The first is the necessity of financial savings which accrue from the purchase of materials and equipment in large amounts. Similar savings result on labor, and the costs of building and operating construction camps when construction is undertaken in sizeable amounts, in contrast to small, scattered projects. Great economies in personnel required for surveys and supervision can be effected when the work is concentrated in fewer and larger units. In most of the areas, the short construction season is also the visitor season. With travel constantly on the rise, it becomes increasingly necessary to avoid having the bulk of the areas in a partially torn-up condition resulting from construction activities, over a period of years. By concentrating construction in fewer areas per year, useable facilities can be completed and put into use in a shorter time with construction moving on to other areas.

It is recognized that badly needed projects do exist in isolated locations not susceptible to the "package" approach. Such items will be scheduled in accordance with relative need. However, it is likely that as much as 80 percent of construction funds will be programmed on a basis of complete, or sizeable units of accomplishment. Legislative authority covering MISSION 66 programs will be sought by broad categories, as outlined later in this report.

MISSION 66

1. Parkways

The Service should accelerate the rate of completion of the eight authorized National Parkways. Short, uncompleted sections should be finished so that continuous roadway may be available for visitor enjoyment, and aggravating detours eliminated. Sections of dangerous roadways should be reconstructed at the earliest practicable date in the interests of human life and safety.

Although promising progress has been made on some of the Parkways during the past few years under authorization provisions of the Federal Aid Highway Acts, it is believed that \$15,000,000 could be utilized for this purpose annually. The amount of \$11,000,000 is authorized for the 1957 fiscal year and it is recommended that this amount be increased to \$15,000,000 for the nine year period 1958 through 1966. This would provide a total of \$146,000,000 for the ten year period 1957-1966.

MISSION 66

2. Roads and Trails

As in the case of Parkways construction, it is being recommended that the rate of roads and trails construction be accelerated. The amount of \$12,500,000 is authorized for obligation and appropriation for the 1957 fiscal year by the Federal Aid Highway Act of 1954. It is proposed that this authorization be increased to \$15,000,000 annually for the nine year period 1958 through 1966, which would provide a total of \$147,500,000 for the ten year period 1957-1966.

Much of the 6,900 road mileage in the 180 parks and other areas administered were built to standards which never envisioned the types or volumes of traffic now being received. Visitor safety requires that many miles be reconstructed to better accommodate two-way traffic; narrow and crooked alignment must be remedied; one-way bridges must be replaced; turnouts and parking areas must be provided to obviate hazardous roadside parking; and hundreds of miles of guardrail and guardwall should be replaced in the interests of safety, etc.

About 90 percent of roads and trails funds are for reconstructing, resurfacing, and realigning existing road systems, for replacing bridges, elimination of sharp grades and turns, etc.

MISSION 66

3. Buildings, Utilities, and Other Facilities

Records show the Service has never been able to keep abreast of needs for buildings, utilities, campgrounds, and other physical facilities. Study of annual reports of a generation ago discloses that there has always been a backlog of developments needed to meet current visitor load. This situation is a most undesirable one, and has been aggravated considerably because of unprecedented increases in volume of public use during the postwar years. Although the Service is currently faring reasonably well with its highway construction programs, including work on some of the parkways, the programs for the construction of other facilities have lagged far behind needs. Prior to the 1947 fiscal year less than \$1,000,000 was appropriated in any one year for the construction of buildings, utilities, and other facilities, except for the fiscal year 1931. A program of \$10,000,000 a year for ten years is proposed by MISSION 66.

Analysis of the postwar construction appropriations for the past ten years, 1947 through 1956, shows that about 78 percent of the total has been for constructing roads, trails, parkways, and that only about 22 percent has been for other facilities. This disproportionate allocation of funds for developing the parks has added much to the Service's operating difficulties, and produced a large number of visitor complaints. While there is a sizeable backlog of road and parkway construction, other construction needs must be satisfied to attain a more balanced development program. The accelerated pace of highway construction outside the national parks, together with the rapidly expanding population makes it inevitable that millions more of our people will come to the national parks. Means are being afforded to get more people to the parks swiftly and in greater comfort and safety. When they arrive, they will find the parks sadly lacking in even the most urgently needed facilities, unless this phase of development is accelerated.

MISSION 66

A summation of the foregoing programs requiring Federal appropriations follows:

TENTATIVE REQUIREMENTS FOR A TEN YEAR
PROGRAM OF DEVELOPMENTS REQUIRED TO MEET AN ANNUAL
VISITOR LOAD OF 80,000,000

<u>Purpose and Explanation</u>	<u>Amount</u>
1. <u>Parkways:</u> The Federal Aid Highway Act of 1954 authorizes the appropriation of \$11,000,000 for the 1957 fiscal year. It is proposed that this amount be increased to \$15,000,000 annually for the nine year period 1958 through 1966. This would provide a total for the ten year period of	\$ 146,000,000
2. <u>Roads and Trails:</u> The Federal Aid Highway Act of 1954 authorizes the appropriation of \$12,500,000 for the 1957 fiscal year. It is proposed that this amount be increased to \$15,000,000 annually for the nine year period 1958 through 1966. This would provide a total for the ten year period of	\$ 147,500,000
3. <u>Buildings, Utilities, and Other Facilities:</u> Contractual authorization would be sought to the extent of \$10,000,000 annually for a ten year period .	\$ 100,000,000
4. <u>Employee Housing:</u> It is proposed to seek special legislation which would authorize the construction of employee housing at the rate of \$1,500,000 per year. Contractual authorization will be sought in this connection. Housing construction costs would be self-liquidating over a 50 year period	\$ 15,000,000
5. <u>Airports and Aviation:</u> The Act of March 18, 1950 (PL 463 - 81st Congress) authorizes appropriations of not to exceed \$2,000,000 for the purposes of constructing airports in or in close proximity to national parks and other areas administered by the Service. It is proposed that the foregoing Act be amended to increase the authorization to \$5,000,000. It is tentatively proposed, also, that not to exceed \$500,000 of the authorization would be utilized in any one year	\$ 5,000,000
TOTAL	\$ 413,500,000

NOTE: In addition to the foregoing, legislation is proposed to establish a revolving fund as a source for loans to concessioners to encourage more rapid development of food and lodging and other visitor comfort facilities.

MISSION 66

4. Employee Housing

The Problem

One of the most acute problems facing the Service in achieving the objectives of MISSION 66 is the critical shortage of housing for field employees and their families who are required to reside in the areas. Family housing units available are far short of needs, and equally critical is the fact that the major portion of them are substandard. A large number of them were constructed during the period 1870 to 1916 when many of the western areas were administered by the Army; many are old farm and tenant houses which were already on lands at the time they were acquired for park purposes; many units were once old equipment storage sheds, former CCC barracks, contractors temporary construction camps, and other similar structures. Like many other temporary Government buildings, these antiquated, substandard structures have tended to become permanent eyesores. Their replacement has been deferred year after year, decade after decade. The rate of obsolescence is far in excess of the replacement rate. The morale of field employees and their families who must occupy this type of housing facility has been sustained only by their hope and faith in the Government that better quarters will ultimately be provided.

The Solution

Solving the housing problem of the Service by 1966 will require the construction of 100 family-type housing units annually for a period of ten years to provide a total of 1,000 family units, and the construction of 40 seasonal units annually for a similar period or a total of 400 seasonal housing units.

It is recommended that legislation be sought to authorize construction of 1,000 family housing units on a modified amortization basis. Elements of the plan are as follows:

(a) Secure contracting authorization of \$1,500,000 annually over a period of ten years. This will provide for the construction of 100 family housing units annually at an average cost of \$15,000 per unit.

(b) The houses to be constructed would comply with Bureau of the Budget requirements as to location, standards, and size.

(c) Rental rates, exclusive of utilities, would be set at an average of \$550 annually or \$21 per bi-weekly pay period. This would provide \$300 annually to apply toward amortizing the capital investment of each unit over approximately a 50 year period and \$250 annually for maintenance and repairs. The average rental, exclusive of utilities, would be somewhat more than \$21 per pay period in those areas with little

MISSION 66

or no isolation and somewhat less in those areas with a greater isolation factor, but the average rent per unit would be \$21 per pay period. The cost of utilities where secured from commercial sources would be paid directly by the employee. Where utilities would be furnished by the Government, comparable charges to commercial rates would apply.

(d) That portion of the annual rentals representing two per cent of the capital investment would be deposited in an amortization receipt account for return to the Treasury, and would amortize the capital investment over approximately a 50 year period. That portion of the annual rentals representing maintenance and repair costs would be deposited as an appropriation reimbursement to offset the cost of providing such services by the Government.

(e) The specified rates are based on approximately 100% occupancy during the amortization period. Accordingly, the 2% annual factor for amortization would be increased by whatever percentage might be necessary to offset rental losses due to vacancies occurring as a result of personnel turnover and other reasons. This factor would be relatively small.

(f) In the event of loss of quarters constructed under this program by fires, or other so-called "Acts of God", the loss would be considered as qualifying as an emergency reconstruction project and replaced by charges against the Service's appropriation available for construction of buildings, utilities, and other facilities, in the same manner as under current procedures.

(g) Construction of seasonal housing units would not be financially feasible under the amortization program as the annual amortization factor would have to be absorbed during a three to six month seasonal occupancy period. This would, in effect, increase the amortization factor from 2% to approximately 4% to 8% or too high without jeopardizing the financial soundness of permanent family type housing. Accordingly, seasonal housing would be financed from direct appropriations for construction of buildings and utilities. Contract authorization for construction of needed buildings and utilities will be sought under a separate legislative proposal.

(h) Family housing units under the amortization program would be simple in plan, constructed of durable materials, and provided with standard equipment in order to reduce maintenance costs and insure economical replacement and repair costs. For economic reasons construction would be concentrated by areas according to the greatest overall need. This will permit contracting for a maximum number of units of similar design in one area at one time to secure the lowest unit cost.

MISSION 66

Discussion

The above plan does not contemplate payment of interest on the capital investment, insurance, and other operating costs which are normally inherent in any such program. Neither does the program include provision for financing the residential road system and utilities necessary to service the housing facilities which are also normally included as a part of housing costs. Also, land values normally considered as a part of the capital investment would be excluded. Rentals, however, would have to be maintained at a sufficient average overall level to provide for adequate maintenance and repairs and in addition amortize two percent of the capital investment annually. The tentative rental rates, exclusive of utilities, for the housing under the amortization program as proposed will, therefore, be substantially less than for equivalent housing values provided commercially where all costs must be considered in fixing rental rates. At the same time, it must be realized that the proposed rates, exclusive of utilities, would still be higher than the present average rental of approximately \$13 per pay period for existing Service house-keeping quarters. Accordingly, upward adjustments of present rental rates may be necessary, especially in parks having high isolation deductions, in order to insure the success of the proposed housing program under a modified amortization plan.

MISSION 66

5. Airports and Aviation

Any study of current and estimated future needs to meet public demands must take full cognizance of modern modes of travel. Within the life spans of most of us, we have seen the transition from horse drawn vehicles to use of automobiles in the parks. Proposals to ban the automobile from entry to the parks were given serious consideration some 40 years ago, and considerable controversy surrounded proposals to construct higher standard roads for automobile use.

In a few short years we have seen air travel develop from use of the slow cumbersome open cockpit bi-plane for the adventurous few to the modern multi-motored, speedy and luxurious transports of today. Today air passenger traffic exceeds that of Pullman car use of trains. It is difficult for production lines to keep pace with improved flight techniques. Jet propelled flight at speeds faster than sound - vertical take-offs - increased use and improvements of helicopter type vehicles - all are forerunners of vastly improved flight methods which will surely be commonplace within the span of a few years.

The MISSION 66 Staff makes no specific forecasts - they are cautious in this field. However, the time has come to give recognition to an already existing need for facilities to serve the large numbers of visitors who wish to come to the parks by air. This need was recognized by the Congress in 1950 through passage of the Act of March 18, 1950, which authorized the Secretary of the Interior to acquire, construct, operate, and maintain public airports in, or in close proximity to, National parks, monuments, and recreation areas. Among other things, that Act authorized the appropriation of \$2,000,000 for developing airports. There is already sufficient demand to warrant planning for accommodations in the areas which follow:

<u>State</u>	<u>National Park</u>	<u>Airport</u>	<u>Priority</u>	<u>Proposed Class</u>
Montana	Yellowstone	West Yellowstone	1	4
Arizona	Grand Canyon	Tusayan	2	3
Montana	Glacier	*St. Marys	3	1
Colorado	Rocky Mountain	*Estes Park	4	2
Texas	Big Bend	Marathon	5	3
California	Yosemite	Mariposa	6	1
New Mexico	Carlsbad Caverns	*White City	7	1
Washington	Mount Rainier	*Longmire	8	2

*Not included in current (1954) revision of National Airport Plan.

Legislation is being proposed as a part of this report to amend the Act of March 18, 1950, and to increase that authorization to \$5,000,000. The amounts tentatively programmed to meet construction needs make provision for airport construction at a rate of not to exceed \$500,000 annually.

MISSION 66

B. LANDS AND WATER RIGHTS

1. Land Acquisition

Privately owned lands within the confines of some 60 areas of the National Park System interfere with their orderly development, protection, sanitation, and use. As long as such lands are not under the exclusive control of the Federal Government, they pose a continuing threat to the integrity of the areas. This can and has resulted in land uses that are in conflict with those of adjoining park lands. The continuance of privately owned lands within the confines of a park, when such interfere with the attainment of the primary objectives for which the areas were established, can no longer be condoned in face of mounting public use and protection needs.

It is imperative that the Federal Government acquire those privately owned lands adversely affecting the use, protection, and development of a park, mostly within or abutting park boundaries. The need for acquiring such lands has long been recognized, and in recent years funds have been made available for such purposes on an annual basis. At the current rate of progress, it will require many years to complete the acquisition and at increasing costs. Experience has proven that delaying action only adds to the ultimate cost as the private holdings in and near a park continue to increase in value. A more vigorous approach must be taken if the acquisition of private holdings is to be accomplished expeditiously and economically. Only with a firm funding program and time schedule can there be any orderly scheduling and acquisition of the private lands.

Approximately \$20,000,000 will be required to purchase those private holdings essential to the execution of the long range program for use and protection of the areas. Such can best be accomplished by an annual appropriation of \$1,500,000 for 10 years, supplemented by the donation of \$500,000 annually by a private individual, as follows:

Federal Funds:

General Land Acquisition	\$1,000,000
Matching Land Acquisition	<u>500,000</u>
Total Appropriation	1,500,000
<u>Matching Funds (Private Donors)</u>	<u>500,000</u>
Total Annual Program	<u><u>\$2,000,000</u></u>

MISSION 66

In 1953 a non-profit corporation informed the Service that it would set aside an amount of \$500,000 which it was prepared to donate to the Federal Government to match a like amount of appropriated funds for the purpose of acquiring privately owned lands. Subsequently, the Act of August 31, 1954 indicated the interest and intent of the Congress in this connection by authorizing the acceptance of donations to be matched by Federal appropriations for this purpose. Federal matching appropriations are limited to \$500,000 annually by terms of that Act.

Further special legislation will be sought to aid in solving the private land problem. In this connection, reference should be made to the chapter entitled "LEGISLATION".

MISSION 66

2. Water Rights Acquisition

The importance of rights to use water are well known in the more arid regions of the West and Middle West. Increasing values are being placed upon these rights with increasing population of communities near the parks and other areas, and the need for additional water increases with increased public use of the areas.

Water rights can be bought and sold in the same manner as real corporeal property or they may be acquired by appropriation. Often the purchase of lands includes the water rights for those lands. Water rights may be lost due to failure to develop systems and utilize the water.

A ten year program to acquire the most urgently needed water rights is estimated to require \$865,000. Because of the continuing availability of funds appropriated for such purposes, an appropriation of \$86,500 per year is proposed.

MISSION 66

II. CONCESSION FACILITIES

Lodging, meals, and transportation are provided in many areas by private concessioners. With few exceptions there has been but little expansion of visitor accommodation facilities to meet the increased demand of the postwar years. Many of the facilities now in use were built in an era that had a much different travel pattern than exists today. Large hotels built in an earlier era for visitors who came by rail do not answer the wants of the majority of visitors who now reach the parks by their own means of transportation. Enroute to the parks they have stayed in modern motel or cabin type accommodations and they desire similar accommodations in the parks. But there are not sufficient numbers of such types of accommodations available there. The visitors of today are not limited by a tour itinerary, and want to have their meals when hunger demands. Thus, more coffee shop type services are required.

More and more visitors are towing their lodging behind their auto, and desire trailer courts. Attempts have been made to provide for house trailers in campgrounds, but for sanitation reasons alone, separate facilities should be provided for the users of house trailers. It is the belief of this Committee that the special types of facilities and services required by trailer users can best be provided by concessioners.

Private capital has been reluctant generally to invest funds for the expansion of existing visitor accommodation facilities or for the establishment of facilities in areas where they do not now exist. Several reasons for this condition are evident. The principal ones seem to be: (1) many of the areas have a short income producing season; (2) money lenders do not like to finance facilities that are to be built on Federally owned land; and (3) the present 20 year concession contract period is thought to be too short by some investors to permit reasonable profit and recapture of capital investment.

There is no doubt that additional accommodations for visitors are required in the areas. Considerable study has been given to ways of encouraging private capital to provide needed accommodations and services. It is proposed that legislation be enacted that would extend loan assistance to concessioners in order to improve facilities, services, accommodations, and equipment made available to the visiting public. Provisions of the proposed Bill are included under "Legislation".

MISSION 66

III. ANNUAL OPERATING NEEDS

A. STAFFING AND GENERAL ADMINISTRATION

The extent of public use influences significantly the amount of personal services required for administering the areas of the National Park System. By 1966 the personnel requirements will be greater than they are today. In 1955, the Service had 3,469 man-years of employment, but this total was estimated to be 1,531 below the actual need.

Standards of measurement can be applied generally to such functions as maintenance of physical facilities in order to obtain the personnel requirements, but standards have not yet been devised that would be applicable across the board to such functions as protection and interpretation. The factors that determine the personnel requirements for an area are so variable from area to area, that even when standards are used for certain activities, adjustments must be made on an individual area basis. As each area must be considered individually, it is not presently possible to prepare a detailed estimate of the personnel requirements of the Service for 1966 in line with the objectives of MISSION 66. However, in light of anticipated use and proposed developments it is roughly estimated that the management, protection, and maintenance of the field areas will require a build-up on a sliding scale to 6,950 man-years of employment by 1966.

This estimate is based on the following assumptions:

1. That the ratio of seasonal to permanent employees will be greater in 1966 than at present, particularly in short season areas.
2. That the length of employment for seasonal employees will increase to conform to the lengthening of the season of heaviest visitor use.
3. That personnel needs will not increase in direct proportion to increase in visitation.
4. That wherever practicable, developments will be planned in a manner to increase the effectiveness and efficiency of handling visitor loads, and will be reflected in personnel requirements.
5. That increases in area administrative personnel will not be needed in the same proportion as protective and interpretive personnel. In most areas basic administrative staffs have been provided, and lessened personnel requirements resulting from consolidation of common service functions such as the fiscal work^{for} groups of areas will tend to offset other increases to some extent.
6. That the greatest increase in protection personnel will be justified on the basis of visitor connected activities.

MISSION 66

7. That moderate increases are needed for protection activities that are not visitor connected.

8. That greater emphasis will be placed on self-help interpretation designed to serve essentially every visitor.

9. That a considerable increase in informational and interpretive personnel is required as a result of anticipated increases in visitation. The largest increases required for interpretive personnel will be justified on the operation of orientation stations, museums, maintenance of self-guiding roads and trail devices, preparation of literature, and research required for interpretation of the areas.

10. That full use will be made when practicable and economical of private facilities and services. This will reflect on the personnel requirements for maintenance and operating personnel.

11. That staffing requirements for an area must be based upon the objectives of that area, the facilities and services which are required to carry out those objectives, and the work potential of each category of employee, giving consideration to the peculiarities of the particular area.

12. That each area whose resources are subject to damage or destruction should be staffed regardless of the extent of visitor use.

By 1966 the management, protection, and maintenance of field areas will require an estimated 6,950 man-years of employment, representing an average annual increase of 10% of the current work force over a ten year period. Comparison of authorized employment for the 1955 fiscal year with that tentatively proposed for the 1966 fiscal year is shown in the following:

<u>Category</u>	<u>Authorized 1955</u>		<u>Estimated 1966</u>	
	<u>Employee</u>	<u>Man-Years</u>	<u>Employees</u>	<u>Man-Years</u>
<u>Management and Protection</u>	2,747	1,822	5,407	3,450
<u>Maintenance and Rehabilitation of Physical Facilities</u>	2,846	1,647	6,118	3,500
TOTALS	5,593	3,469	11,525	6,950

More accurate data can be supplied in this connection upon completion of tabulating data submitted, or to be submitted, by officials in charge of individual areas.

MISSION 66

It is planned that very little increment be made to the funds and staff of the Washington and Regional Offices performing general administrative functions. Continued emphasis will be placed upon delegating maximum responsibility and authority to officials directly in charge of the parks and other areas.

MISSION 66

B. MANAGEMENT, PROTECTION, AND INTERPRETATION

The success of the Service in discharging its responsibilities rests to a large extent on the effectiveness of management and protection activities at the area level. The most important element is area personnel. They serve as the first line of defense against threats of destruction of park resources and facilities and act as official hosts to millions of guests each year; they look after the comfort and safety of the visitor; and they make possible the maximum understanding and enjoyment of the areas.

These employees are the first to feel the impact of increased public use. Crowded traffic conditions at points of visitor concentration call for additional traffic control personnel; highway patrols must be maintained at high levels to obviate tie-ups and to enforce regulations designed to protect the visitor; higher fire hazards exist with increased use; the incidence of accidents increases; people become lost and considerable expensive man-power must be applied to immediate search and rescue operations; vandalism and theft are prone to increase; and fishing and hunting and other regulations designed to protect park wildlife and other features must be enforced.

The American is probably one of the most curious of people; he wants to know about what he observes and he does not hesitate to ask questions; he is demanding more and more information to satisfy an appetite for knowledge whetted by the influences of radio, television, and other modern media of communication. The demand for guide, interpretive, and other visitor services is huge and is growing. Campfire and other planned interpretive and informative programs must be provided. Considerable research must be accomplished to provide accurate information about wildlife, scenic and scientific features. Proper education of the visitor is one of the most effective means of protecting park values.

Although gratifying progress has been made in securing additional personal services during the past two years, there still exists a great deficiency of personnel for all phases of management and protection. This deficiency must be overcome and greater emphasis placed upon the problem if the Service is to keep pace with anticipated visitor increases. The Service has been fortunate in receiving most fair and impartial hearings of its problems in this field. There must be no let-up in efforts to insure that officials of the Department, the Bureau of the Budget, and the Congress are fully and fairly informed.

It is estimated that about \$18,300,000 will be needed for management and protection needs during the 1966 fiscal year. Of this amount, about \$16,000,000 will be required for needs in the areas, and \$2,300,000 will be required for special programs, such as those involving State cooperation, river basin studies, etc. A more accurate total will be available upon completion of compilation of data to be secured for purposes of MISSION 66.

MISSION 66

1. Forestry and Fire Control

This activity may be divided into four sub-activities: namely, Forestry Management, Fire Protection Services and Equipment, Fighting Forest Fires, and Tree Preservation Services and Equipment. In general, the various sub-activities, except for equipment maintenance and replacement and supporting expenses, are sufficiently financed to maintain a high level of efficient protection. It has not been possible, with funds heretofore provided, to finance an adequate replacement program for equipment. Similarly, ever increasing supporting costs has resulted within a given budget in curtailment of required personal services. Funds required for this activity should be increased gradually from \$664,300 in 1957 to \$861,365 in 1966.

The Forestry Management sub-activity includes the services and expenses of the technical forestry staffs in the Washington and the Regional Offices. Only a few field areas have professional foresters on their staffs and the balance of the areas need on-the-ground assistance to carry out their forest protection activities. It is proposed to increase the 1957 fiscal year estimate of \$115,850 for this sub-activity by \$40,000. This increase will be spread over the ten year period to reach \$155,785 by 1966. The bulk of this increase would provide for the re-establishment of the Fire Control Training position in the Washington Office and for three forester positions in the Regional Offices.

The Fire Protection Services and Equipment sub-activity includes on-the-ground services and expenses of fire control and presuppression organizations, fire control aids, lookouts, smokejumpers, and other expenses at the park level. Approximately \$40,000 annually is required to maintain and replace specialized fire control equipment. Approximately \$12,000 annually is required for additional seasonal fire control aids to supplement existing protection forces. Altogether, an increase of \$447,535 is estimated as needed over the 1957 fiscal year estimates. This increase would be spread to reach \$861,365 in 1966.

It is proposed that funds for the Forest Fire Suppression and Emergency Presuppression sub-activity be restored to \$125,000 to more nearly meet the average annual costs. Actual costs during the ten year period 1945 to 1955 averaged \$128,500. The allocation for this sub-activity in 1957 fiscal year was \$100,000.

For a number of years an itinerant tree maintenance crew has been operating in the Region One areas, and to a slight extent in Regions Two and Three. This crew has been financed from the Tree Preservation and Tree Preservation Equipment sub-activity. Similar activities are required in a number of the areas in the West, and it is proposed to increase funds for this sub-activity from \$34,055 in 1956 to \$85,460 by 1966.

MISSION 66

(a) Forest Pest Control. Funds for Forest Pest Control projects of the Service are received by transfer from the Department of Agriculture. These funds are classified by two sub-activities; White Pine Blister Rust Control, and Forest Pest Control (for control of forest insects and miscellaneous tree diseases.)

The White Pine Blister Rust Control program of the Service is nearing maintenance status, and by 1961 all initial or heavy cost work should have been completed. Consequently, costs of the program are expected to decline from an allocation in 1956 of \$285,000 to approximately \$30,000 in 1966.

The Forest Pest Control program is a variable one depending upon the severity of insect depredations from year to year. Actual costs for control work have varied from a maximum of about \$150,000 to about \$40,000 in any one recent year. Except for the years 1957 through 1959 needs under this activity have been leveled off at \$70,000 representing estimated average annual cost of control programs. Unusually large epidemics are frequently financed through supplemental appropriations earmarked for that work.

MISSION 66

2. Soil and Moisture Conservation

A Service-wide Soil and Moisture Conservation Program is a means for the restoration and protection of many areas in the System where unnatural erosion prevails, and improving the land resources in other areas that are rapidly deteriorating through sheer visitor impact.

A continuing survey of soil and moisture conservation requirements in the 180 areas in the System, discloses that more than 70 areas requires remedial measures. Of the approximately 24,000,000 acres of Federally owned land within the authorized boundaries of the areas, it has been determined that approximately 3,900,000 acres (approximately 16% of the total) have been seriously eroded or badly depleted by unnatural erosion and prior misuse.

Typical of problems in Service areas is the depletion of plant foods from destructive farming operations in certain areas; active and deep erosion in loess soil encroaching on areas of public use; and prevention of further stream erosion by installation of water control structures. Other examples are over-grazing of limited winter range by excessive unnatural concentrations of wildlife in some of the larger western parks, and trespass grazing which has created adverse conditions, by domestic stock, in areas without resources or developments to control such problems.

The current appropriations for this work amounts to \$100,000 per year and is totally inadequate in relation to actual needs, with the result that requirements in many areas have been increased rather than diminished. In order to meet requirements for immediate correction in the areas disclosed to have severe and critical erosion problems, it is necessary that the program be accomplished within the next ten years and an annual appropriation of \$200,000 will be required to complete it in that period of time. This amounts to a \$2,000,000 program; however, since soil and moisture conservation is a continuing program, it must be recognized that this money will complete only the work outlined in the present surveys.

MISSION 66

3. Signing

Park signs and markers probably reach more visitors with information than any other medium. This fact obligates the Service to give high priority to an active sign production program in every park, to keep the signs and markers in a high state of maintenance once they are erected, and constantly to strive to improve their quality. Although a basic and obvious necessity in any park, this part of the information and interpretative program for visitor convenience and benefit has received less attention and a lower expenditure of funds than it needs. This failure must be corrected. A large part of the signing program in the future probably should be considered a part of the roads and trail construction and maintenance programs.

The traveling public is used to signs and expects to find them at all important features and where information of any kind would be useful. There are many different types of signs, including: (a) approach; (b) entrance; (c) traffic directional; (d) geographical place names; (e) identification of visitor comfort facilities; (f) narrative information at features; and (g) graphic sign-exhibits at certain features.

Special attention should be given to providing signs with geographical place names of streams, lakes, mountains, and other significant terrain features. Geographical place names should generally be accompanied by elevation in feet above sea level. All road crossings of the Continental Divide should be signed.

All types of signs must be attractive, easily read, and quickly comprehended. They must be conspicuous to serve their purpose. That means that they should be large rather than small. The words should, in general, be short and of common knowledge -- seldom if ever academic and technical. The sentences should be short; their structure simple, not complex. Children of upper grade school classes should be able to read and understand at first reading every sign in every park.

There need not be uniformity of color and design and material in signs throughout Service areas. What would be appropriate and effective in a forested wilderness park like Yellowstone might be incongruous in a place like Adams. Signs, while always conspicuous, should be in harmony with their surroundings and suited to their subject.

MISSION 66

4. Audio-Visual Services

The Service has an important obligation to provide information so that the public may gain knowledge and understanding of the National Park System. This obligation is both to that part of the public which makes first-hand use of the parks and to that part which does not. The opportunities to reach the latter part of the public, of necessity, have been limited almost entirely to press releases. However, of the many means available today for reaching the public it is probably the least satisfactory and its results the least lasting.

The Service has been able to accomplish a good deal toward this greater public understanding by encouraging and assisting outside individuals and agencies to produce written material, motion pictures, slides, and film strips.

The Service will be falling short of doing its full job of acquainting the American people with the National Park System, why it exists, what uses are made of it, and what their own responsibility toward it is, until it has the means to do the following things:

1. Support financially a continuing program of motion pictures of professional character.
2. Encourage and meet demands upon it for motion pictures, slides, and slide lectures.
3. Maintain an up-to-date still photograph collection that will satisfy an ever present need.

To accomplish the above, it is estimated that an annual budget of not less than \$175,000 would be required. This would provide for the employment of 12 to 14 additional employees.

MISSION 66

5. Publications

This program must be based on providing park visitors with a free folder enabling them to find their way around the park, to learn of the principal features of the park, and of accommodations available. There should be a coordinated program of sales publications giving in greater detail information on special features or characteristics of the park.

Free Publications: The number of free publications must necessarily be based on the visitation. Studies have shown that on an average cars entering parks will have 3-1/2 people. A minimum goal should be providing one free folder to each car. There are many special groups, such as school children, where each person should receive a piece of free literature, and then there are the numerous individual requests by mail for park literature. Considering all these factors, it seems reasonable to project free literature needs on the basis of one piece for every three park visitors.

The present supply of free literature is inadequate and should be materially increased. In the last four years for which complete figures are available, 1950-1954, there was one piece of free literature for every 6 visitors. This is just one-half the quantity needed according to the formula of 1 to 3. The 1957 estimate projects the use of \$124,500 to print 11,100,000 copies of free literature. This will be at the rate of one piece of literature to 5 people using the figure of 55,000,000 visitors in that year. Costs of printing show that the average cost of free literature is 1.12 cents per copy. Using this cost as a base, it follows that 18,000,000 copies of free literature for a visitation of 55,000,000 (1 to 3) will cost \$201,600. Actually, what is needed is an increase of approximately \$75,000, or a 60% increase, to meet the public need.

The park visitation is projected to reach 80,000,000 in 1966. This means that 26,666,666 copies of free literature will be needed in that year. If the printing costs remain relatively the same; they are at present 1.12 cents a copy; then this will require a budget of \$298,666. The average yearly cost of free literature for the ten year period will be \$250,132, double what it is now.

Sales Publications: Approximately 80 percent of the publications budget goes for free literature. Most of the remainder pays for sales publications. At present there are four series of these:

Historical Handbooks	(22 in print)
Natural History Handbooks	(3 in print)
Service Activities Series	(1 in print)
Monograph Series	(2 in print).

MISSION 66

This type of publication costs on an average \$1,700 to \$1,800, except the Monograph, which varies widely in cost. Several will be published annually as money becomes available. Ten are projected for 1957 fiscal year and the number should be increased. In 1956 fiscal year, \$14,000 is budgeted for sales publications. The Government Printing Office reports steadily increasing sale of National Park Service sales items. In 1954, the last year for which complete figures are available, sales receipts amounted to \$60,923.07, an increase of \$24,000, or 64 per cent, over 1953.

Special Type Publications Needed: The following new publications should be prepared and printed. There is a proven need for them:

1. Free publications for school children, grades 5 - 8.
2. Sales publications for secondary schools.
3. Publications for special youth groups (Boy Scouts, Girl Scouts, Campfire Girls, Four-H Clubs).
4. Publications designed to answer the usual range of questions about the National Park Service, its responsibilities, policy, and visitor uses.

This will save a great amount of time in preparing correspondence and will be economical in cost. One recent study showed that sending copies of available publications to answer an inquiry of regional scope costs 37 cents plus 8 cents postage; sending them to answer an inquiry of National scope costs 74 cents plus 16 cents postage. One booklet designed for this type of inquiry would be an economy. For one three months period the study showed 1,065 requests by mail were received in one of five Regional Offices, 745 of them from teachers and pupils (more than 66 per cent).

5. Monograph Series.

These would be comprehensive treatments of some phase of research work of the Service. The Service has an obligation to make available to the public the results of its findings that are of general interest. They would be contributions to scientific and learned knowledge. A few of these each average year are projected. Cost will be about \$10,000.

Cooperating Associations: Various cooperating non-profit associations prepare and publish specialized booklets in history, natural history, and scientific subjects related to the parks. This, in effect, is an extension of the publication program of the Service for visitors and public benefit. Editorial personnel are needed to assist the associations in improving the quality of these publications.

MISSION 66

Staffing and Budget Needs Publication Section:

The program includes eight (8) full time new positions, consisting of, primarily, editorial and graphic presentation. Additional staffing costs would run approximately \$43,755 per year.

The ten year budget for publications including free and sales literature would cost \$3,288,870.

MISSION 66

C. MAINTENANCE AND OPERATION OF PHYSICAL FACILITIES

GENERAL

It is extremely difficult for the uninitiated to envision the scope of the maintenance and operating problem, or the size of the physical plant requiring attention. However, some idea may be gained from the fact that the Service maintains 6,800 miles of roads, 8,100 miles of trails, thousands of buildings of all types, including warehouses and storage structures, administration buildings, museums, apartment and individual housing units, historic and memorail structures, prehistoric structures, etc. Utilities systems, including water, lights, sewage, radio and telephone, etc., must all be provided. In a large park such as Yellowstone, all of the facilities to be found in a metropolitan area must be provided.

The Service must frankly admit that it has not been able to cope with maintenance and operating requirements, because of lack of funds and the large volume of public use being experienced. The situation has been met through applying funds and personnel resources to only the most urgent needs. Normal, routine maintenance has been given secondary consideration, as emergency needs have been utilizing practically all of the available resources. Operation of utilities and maintenance of sanitary facilities must receive first attention; maintenance is perforce relegated to a place of secondary importance.

The ratio of maintenance and operating funds to the capital investment is far below what might be considered necessary to meet normal requirements. The value of physical facilities in the 180 areas administered is estimated at approximately \$469,000,000. The capital investment envisioned by MISSION 66 will be about \$720,000,000 in 1966, as mentioned previously under the chapter "CONSTRUCTION." The 1956 fiscal year appropriation of \$8,950,000 provides a maintenance and operating rate of less than 2 percent of the capital investment. It is estimated that a minimum of 2-1/2 percent should be provided for maintenance of facilities, and that a rate of 4 percent for maintenance and operating certain facilities such as water, sewage, and electric systems, clean up of developed campgrounds, etc.

MISSION 66

1. Roads, Trails, and Parkways

The latest statistics show that the Service has been maintaining its roads at a much less average cost per mile than the National average. Various arguments have been set forth against comparing Service costs with National average costs, among them the fact that most Service roads do not carry the heavy trucking or passenger traffic volumes of many of the State and National road routes. On the other hand, many Service roads are deliberately constructed in terrain and along routes which would be avoided by other road construction agencies, so that the visitor may gain maximum benefit from his travels.

It has been concluded generally that a conservative percentage of the investment in road construction should be used for determining maintenance needs. For this purpose, MISSION 66 recommends a minimum maintenance rate of 2-1/2 percent of the investment.

Records show that only about 10 percent of the road construction funds is for additions to the existing highway system. The remaining 90 percent is for reconstruction, re-surfacing, or realignment of existing highways. Accordingly, only 10 percent of the estimated capital investment in highway construction during the next 10 year period is being considered as increment to the existing investment. The entire cost of parkways construction is considered as new investment. It is estimated that the capital investment in roads, trails, and parkways will amount to about \$389,000,000 in 1966. At the rate of 2-1/2 percent of the capital investment, \$9,725,000 is indicated for roads and trails maintenance purposes in 1966.

MISSION 66

2. Buildings, Utilities, and Other Facilities

About 25 percent of the capital investment in physical facilities represents utilities and other facilities which must be operated as well as maintained. A maintenance and operating rate of not less than 4 percent of the investment in such facilities is considered to be the minimum required. A rate of 2-1/2 percent of the capital investment is considered the minimum required for maintaining buildings and other structures and improvements which will not require operating expenses. Because of the lack of buildings, utilities, and other facilities, most of the capital investment in such facilities during the next 10 years will be for additional units, and it is estimated that no more than 10 percent will be for replacing existing facilities. It is estimated that the capital investment in buildings, utilities, and other facilities will have a dollar value of about \$331,000,000 in 1966. Application of the maintenance and operating rates mentioned previously produce an estimated fund requirement of about \$9,511,000.

MISSION 66

3. Preservation of Historic and Scientific Collections

The Service has a major responsibility in preserving invaluable assets in the following categories:

1. Historic Paintings, Prints, and Other Illustrative Materials
2. Historic Artifacts
3. Archeologic Artifacts
4. Scientific Objects
5. Museum Records.

There are approximately 800 historic paintings, prints, and drawings in the care of the Service, most of which are located in the areas having direct relationship to the articles. There is no reliable count available of the number of historic and archeologic artifacts, pieces of furniture, furnishings, textiles, ceramics, etc., in the care of the Service, but the number is large. Some idea of the value represented in these items may be gathered from the \$62,000 tax valuation placed upon the furnishings of the Vanderbilt Mansion a few years ago, or the \$15,000 insurance valuation which the Metropolitan Museum of Art carried on one painting borrowed from the Independence Hall collection.

It is recommended that this program, carried on entirely for field areas by a small staff located in Washington, D. C. and Globe, Arizona, be continued at the minimum present levels, and that it be supplemented to the extent of \$513,000 during the next ten year period, to overcome the huge backlog of preservative work required to protect invaluable collections, furnishings, etc. This supplemental program could be carried on at the rate of \$51,000 to \$52,000 annually.

MISSION 66

D. PERSONNEL DEVELOPMENT AND TRAINING

The results obtained from personnel training programs in several fields of activity have proven their worth. A limited number of promising young field employees have been able to participate in the Department of the Interior's Management Training Program. The Service has conducted personnel training programs in its regional offices. Training courses have been conducted in the field for interpretation and protection personnel, for forest fire and structural fire control, and for selected groups in mountain climbing and rescue work.

The training requirements of the Service are currently being studied to determine the future scope of training needs. Executive and middle-management development appear to be two fields which will receive more emphasis. Professional and technical training will have to be accelerated to develop expanded public contact staffs. Other fields of Service operations are being studied to determine the extent to which training can assist in achieving program goals. A comprehensive training plan for the Service is being prepared for the consideration of the Service's Management Improvement Committee.

IV MISSION 66

COOPERATIVE ACTIVITIES

Almost from the time the National Park Service was established in 1916, there has been a realization of the natural close relationship between the agencies at different levels of Government dealing with park and recreation work. Congress recognized this natural relationship in the act of June 23, 1936 (49 Stat. 1894) and, in effect, stated the purpose of the Service's cooperative activities, which is to ". . . provide data helpful in developing a plan for coordinated and adequate public park, parkway, and recreational-area facilities for the people of the United States . . . ", "to make a comprehensive study of such programs," and ". . . to cooperate with other Federal, State and local agencies in planning their park, parkway and recreational programs."

The 10-year program for this work is summarized under the following headings:

MISSION 66

A. AREA INVESTIGATIONS

The purpose of this program is to permit the Service better to maintain the high standards of quality, national significance, and integrity of existing and proposed areas of the National Park System. It is proposed to do this by accelerating the planning and studies necessary to accomplish the following objectives within the program period:

1. Preparation of a National Park System Plan

While this is presented as a separate planning project, it is desirable that it be coordinated with and become an integral element of an over-all recreation plan for the entire United States.

It is generally accepted that the National Park System should embrace the broad outlines of our outdoor heritage and of man's career on this continent. It is known that there are types of areas of national significance not adequately represented in the System. It is believed that a thorough reappraisal of the existing areas might disclose certain types that are too generously represented in the System or other wise lacking sufficient justification for retention in it. Planning the orderly achievement of a well-rounded System, which is the purpose of this program, requires a comprehensive survey of all significant major types of areas--scenic, scientific, historic, seashore, etc.--in the United States and its Territories to determine those which are of sufficient national significance to be included in the National Park System. Such a study and selection of potential new areas and the reappraisal of certain existing ones would be made within the framework of appropriate criteria already approved, or where lacking, to be perfected in advance.

This study would begin in fiscal year 1959 with a 6-month coordinator position in the Washington Office to perfect criteria and programs for beginning full-scale field work on the National Park System plan in fiscal year 1960. It would run for two full years in the field (fiscal year 1960 and 1961) and for an additional year to complete and summarize its recommendations in the Washington Office.

MISSION 66

2. Completion of Comprehensive Boundary and Scientific Studies

Completion of Comprehensive Boundary and Scientific Studies of each existing area, to determine its long-term boundary needs for protection, development and use in keeping with, and to permit accomplishment of, the primary purpose for which the area was established.

The primary task, therefore, is to define fully those values and needs for each park. In the larger and more complex ones, this should be done for each topographic or other appropriate unit of the park. Many areas will require scientific studies by technical experts in one or more of the several fields of science. From the analysis and correlation of such information the Service would be in a position to say authoritatively what it did--or did not--need, and why. In the process of finding out there would be produced information invaluable in improving the protection, interpretation and public use of the park.

This boundary and scientific study program is planned to run for eight years in the field, beginning in fiscal year 1959 with a full-year position in the Washington Office for advance planning and coordination of the regional programs, and five Park Planner positions in the five regions (9 months) to get the field work underway. The latter work would be coordinated in the field by the regional basic staff Area Investigation men, in cooperation with the Regional Directors, the Superintendents and their staffs.

Study and recommendation of necessary or desirable legislation for such purposes as: (a) revocation of authorizations for projects considered sub-standard or no longer feasible; (b) boundary revisions; (c) area authorizations or abolishments; (d) standardization of provisions of existing park laws by adding desirable clauses and by revoking those which authorize non-conforming uses (dams, mining, etc.).

MISSION 66

B. STATE COOPERATION PROGRAM

The Federal Government has a very real interest in State Park areas because they supplement and complement the National Park System and because they comprise an important segment of the Nation's recreation plant. The Federal Government also has a statutory responsibility to provide legitimate leadership in the State park and recreation field by furnishing advisory and consultative assistance.

The State Cooperation program proposed would provide sufficient personnel to meet in a reasonably adequate manner requests from other Federal, State, and local agencies for consultative and advisory assistance in planning for their park, parkway, and recreation-area programs. It also would make provision for meeting National Park Service responsibilities in cooperating with General Services Administration in making investigations and recommendations on applications of State and local agencies for surplus Federal Properties for public park, recreation, and historical monument purposes under provisions of the Surplus Property Act of 1944, as amended, and in cooperating with the Bureau of Land Management in making investigations and recommendations on applications by State and local agencies for public domain land for park and recreation purposes under provisions of the Recreation Act of 1926, as amended. These activities, in a sense, constitute a Federal extension service in the public park and recreation field.

Included in the program are personnel and funds for special studies on park and recreation structures, State park policies, and use of prison labor in State parks.

The proposed organization would (1) give more adequate service to the States, (2) assist community recreation programs by encouraging, advising, and assisting the States to work direct with the communities, and (3) undertake research in the State park and recreation field and publish the results.

In connection with this program, it would be desirable to obtain legislative authority for appropriation reimbursement. This would allow the Service to accept payment from State and local agencies for salaries and expenses of Federal personnel for services rendered on special occasions and to reimburse appropriate accounts rather than to deposit such funds in miscellaneous receipts. Inclusion of such a provision in a "basic authority" bill was approved by the Director in 1954.

MISSION 66

C. RIVER BASIN STUDIES

Through the development of "a plan for coordinated and adequate public park, parkway, and recreation area facilities for the people of the United States", the Service will be in a position more effectively (a) to support the conservation and appropriate use of park and recreation areas of national significance, and (b) to give assistance to other Federal, State, and local agencies and organizations in planning, acquiring, developing, and administering areas of importance in their areas of responsibility for recreational use.

1. Preparation of A National Recreation Plan

Progress toward formulation of a national recreation plan is being made through several regional studies, such as the New England-New York, the Atlantic and Gulf Coastal Survey and the Arkansas-White-Red Inter-Agency recreation resource surveys. With adequate funds, field work for completing the balance of the State and regional recreation surveys could be accomplished in three years, and a National recreation report could be completed in one year thereafter. The report would include (a) a general discussion of over-all recreation needs, trends, the economics of recreation, and (b) recommended systems of recreation areas and programs.

The following regional recreation surveys are programmed for completion in order to be utilized in the preparation of the National Recreation Area Plan: Columbia River Basin Survey completed at end of fiscal year 1961 and Missouri River Basin Survey completed at end of fiscal year 1957. (This Missouri River Basin Survey is financed by allocations from the Bureau of Reclamation appropriations.)

MISSION 66

2. Reservoir Recreation Area Planning

The principal functions of this program are to cooperate with the Bureau of Reclamation and the Corps of Engineers in determining the feasibility and extent of recreation developments at Federal reservoirs, to develop recreation plans for Bureau areas, and to negotiate with the States and their political sub-divisions to administer the recreation features of the projects. Thus the State and the local park systems are strengthened, the Federal Government is relieved of this administrative responsibility, and more recreation areas are available to the public to help relieve the visitor load on areas within the National Park System.

The 1957-66 over-all program for River Basin Studies work would continue at approximately its current scope, although it would be increased for a period during two special studies mentioned above, and would level off to require an annual appropriation slightly less than that currently being received.

The program is based on three staff components: (1) augmented basic staff; (2) temporary staffs to conduct and coordinate special river basin studies; and (3) a temporary staff to prepare and coordinate the National recreation plan.

The program includes one full-time position in each region to handle all normal continuing river basin studies work, plus .3 of the funds to pay a pro-rata share of the salaries and expenses of the Regional Chief and two secretarial positions. These regional staff positions will also serve as field liaison for work in completing the National Recreation Plan.

MISSION 66

V. RESEARCH PROGRAMS

A. WATER RESOURCES STUDIES

The availability of water is a potent factor in determining the type of use and extent of development of most parks. The collection of essential data on the water resources of many areas is a vital prerequisite to the design and operation of water supply systems. In areas where there is no surface water, investigations are required to determine availability of ground water and establish claims for its use. Information is needed on privately owned rights to the water resources of some parks in order to develop an integrated plan for use and conservation. In certain areas the Services' rights are being jeopardized by lack of essential data. The dates of first use and the progressive quantities involved need to be determined and recorded since the value of a right is based on the historical priority of use.

The proposed exploitation of water resources outside several of the parks can have an adverse effect on the parks' character and resources. Special studies should be made to determine the effects of the proposed developments.

The ultimate objective of the program for water resources studies is to complete a record of the water resources needed for the development and operation of the areas, to determine and define the water demands and uses, and to collect and develop all data incidental to the establishment of appropriative claims where such is required by State laws.

The estimated cost of the program is \$600,000 spread over a period of ten years.

MISSION 66

B. HISTORIC SITES SURVEY

The Historic Sites Act of August 21, 1935, directed the Secretary of the Interior, through the National Park Service, to make a survey of historic and archeological sites, buildings, and objects for the purpose of determining which possess exceptional value as commemorating or illustrating the history of the United States. (49 Stat. 666).

This work was approximately one-half completed when work ceased in 1941 for lack of funds. A complete inventory is the means the Service needs to handle in a scientific and economical manner the nation's field of historical conservation. This is a constantly recurring activity in complying with existing law, requests from the Congress, Presidential inquiries, requests from other Federal agencies, and the general public. Up-to-date information is needed on present condition of sites studied prior to 1941, in addition to completion of survey on sites and areas not yet studied. Information on that part of the survey already completed is now from 14 to 18 years old.

It is recommended that this survey be resumed. It can be completed in three years at a cost for personnel and equipment of \$132,315 for the first year, and \$109,085 for each of the next two years. Following completion of the Survey, an annual budget of \$12,500 will be adequate to keep the data current.

MISSION 66

C. HISTORIC AMERICAN BUILDINGS SURVEY

The Historic Sites Act of August 31, 1935, directed the Secretary of the Interior, through the National Park Service, to "secure, collate, and preserve drawings, plans, photographs, and other data of historic and archeological sites, buildings, and objects."

Under an agreement among the Department of the Interior, the Library of Congress, and the American Institute of Architects, the Survey began during the latter 1930's. It was terminated, still incomplete, in 1941 and has not been resumed due to lack of funds. Before its work ceased in 1941, the Survey had recorded in some form 7,600 buildings, 2,800 of them being measured drawings. The accumulated records of the Survey contain 25,600 sheets of measured drawings, 29,200 photographs, and 7,600 pages of historical and architectural data. These records cover buildings of various periods and diverse styles ranging from the 17th century to the Civil War period, located in 44 States, the District of Columbia, and Puerto Rico. In general, post Civil War structures were not surveyed. Many types of structures, including dwellings, churches, public buildings, mills, shops, bridges, to name only a few, are represented in the Survey data.

It is proposed to complete the Survey by recording structures from a selected list compiled and approved by authorities in the fields of history and architecture. Such completion is needed to comply with existing law, to protect and preserve architectural design in the United States for posterity, and to make possible the restoration or reconstruction of certain buildings in the public interest.

It is proposed that the Survey be completed in a ten year period. It contemplates an average of 35 persons annually to complete the Survey in ten years, with an annual budget of \$200,000 for salaries, travel, equipment, printing, rents, and contractual services. Total cost for the ten years will be approximately \$2,000,000.

Thereafter, a small staff will be needed to keep the Survey current and to act as liaison with the Library of Congress, the American Institute of Architects, and the National Trust for the Preservation of Historic Buildings, and in assisting them with technical problems concerning restoration, preservation, and survey of historic structures.

MISSION 66

D. ARCHEOLOGICAL SURVEY AND SALVAGE

The Service has been given the responsibility of determining the archeological values of areas involved in various reclamation projects and other areas, and of salvaging archeological materials in these areas. This is in addition to its normal responsibility for archeological investigation and salvage in the areas of the National Park System. This work is essential to the proper use of areas of the System by the public, and the development, management, and protection of them. Following are estimated costs by categories of the continuation of this program on a scale commensurate with needs for the ten year period ending in 1966. These estimates include all personnel as well as equipment and supply costs.

1. Archeology in National Park Areas - - - - - \$ 1,390,000

This work will require \$103,500 the first year,
and reach a peak of \$178,500 in 1966.

2. Salvage Archeology outside the Missouri River Basin -\$ 1,013,500

This work will require \$138,500 the first year,
dropping to an estimated \$44,000 by 1966.

Total Cost N.P.S. Financed Projects - - - -\$ 2,403,500

3. Salvage Archeology within the Missouri River Basin.

Work within this area is financed by allocation from the Bureau of Reclamation appropriation, and estimates will vary with the plans of the Bureau of Reclamation and the Corps of Engineers. Presently it is estimated that a total of \$2,145,000 will be required over the ten year period, ranging from \$245,000 the first year to approximately \$100,000 by 1966.

MISSION 66

VI. LEGISLATION

Such legislation as may be required to permit the development and administration of specific areas in accordance with proposals approved under MISSION 66 will be sought.

It appears that certain general legislation applicable to all areas administered by the National Park Service will be required in order to facilitate accomplishment of the objectives and programs of MISSION 66, including the subjects listed below.

A. ROADS AND TRAILS, AND PARKWAYS

Amend the contract authorization provisions of the Federal Aid Highway Act, commencing with the 1958 fiscal year, to:

1. Increase from \$12,500,000 to \$15,000,000 annually the authorization to contract for the construction of roads and trails.
2. Increase from \$11,000,000 to \$15,000,000 annually the contract authorization for construction of parkways.

B. BUILDINGS AND UTILITIES

Legislation will be proposed to provide authorization to contract for the construction of necessary buildings, utilities, and campgrounds in advance of appropriations to the extent of 10 million dollars per year for a period of 10 years. By its terms, the bill should extend the contractual authorization contained therein to Federal (buffer) areas adjoining areas administered by the Service.

MISSION 66

C. EMPLOYEE HOUSING

Legislation will be proposed to accomplish the employee housing program outlined under an earlier section of this Report, containing the following provisions:

1. Secure contract authorization of \$1,500,000 annually for a 10 year period, to provide for the construction of 100 family residences annually, or a total of 1,000 residences during the 10 year period.
2. The Secretary of the Interior to have authority to fix rental rates at an average level to meet all maintenance, repair, and rehabilitation costs plus an amount of not less than 2% of the capital investment cost to amortize cost of housing over a 50 year period.
3. That portion of the rentals representing the cost of maintenance, repair, and rehabilitation would be deposited as an appropriation reimbursement to offset the cost to the Service of performing these functions.
4. That portion of the rentals (approximately \$12 per pay period per house) would be deposited to a general fund receipt account to amortize appropriations made to construct such housing.
5. Housing would be located within areas administered by the Service, and subject to general Budget Bureau policies as to location, size, and quality.
6. The Secretary would have authority to prescribe such regulations as may be necessary to carry out the provisions of the Act.

MISSION 66

D. AIRPORTS

Legislation will be needed to provide for the construction of airports within or in close proximity to areas administered by the Service. This legislation will provide authorization to enter into contracts for the construction of such airports in advance of appropriations, to the extent of \$500,000 per year for 10 years. The bill will limit the percentage of cost to be borne thereunder by the Federal Government in a manner similar to the terms of the Federal Airport Act, and will provide against the operation of the airports by this Service.

E. NON-FEDERAL LAND ACQUISITION

Legislation will be proposed to authorize a ten year program for acquiring non-Federal lands within areas administered by the Service. The bill will authorize entering into contracts in advance of appropriations for the acquisition of non-Federal lands to the extent of \$1,000,000 per year. This contractual authorization will be in addition to the \$500,000 matching fund authorization contained in the Act of August 31, 1954 (68 Stat. 1037). It will mean, however, an increase of only \$750,000 per year, exclusive of matching funds, since we are now receiving annual appropriations in the amount of \$250,000 for land acquisition.

MISSION 66

F. LOANS TO CONCESSIONERS

A BILL to extend loans to concessioners in National Park Service areas for improving facilities, services, and accommodations for the public, and including the following provisions, will be suggested for consideration by the Congress. It would:

1. Establish a revolving fund, appropriations for which will not exceed \$50,000,000 at any one time.
2. Authorize the Secretary of the Interior to make loans to concessioners from the revolving fund to construct, rehabilitate, convert, and expand facilities for park visitors, including utilities and employee dormitories; and to purchase equipment and supplies necessary for concessioner operations.
3. Loans shall be limited to not to exceed 50% of total cost of structure or facility. Provided, however:

The Secretary may increase loan up to 100% of total cost if he determines that concessioner cannot reasonably secure up to 50% of cost, and,

- a. He determines that proper visitor use and enjoyment of area will be seriously impaired or threatened by failure to provide the improvement, and
 - b. He determines that anticipated revenues will be sufficient to give reasonable prospects of repayment of principal and interest to the Federal Government.
4. No loan shall exceed \$5,000,000.
 5. No loan shall exceed a period of 20 years.
 6. Interest shall be charged at rate of 1-1/2% per annum on loan outstanding. In case of default of payment on principal or interest the rate of interest on either or both shall automatically become 3% from beginning of default until paid.

MISSION 66

7. Loans shall be repaid by concessioner to Treasurer of the United States on an agreed annual basis.
8. The Secretary of the Interior shall pay into Miscellaneous Receipts of the Treasury at close of each fiscal year as interest on loans all interest received in excess of cost of making and administering such loans.
9. In event of default, the United States shall have first lien and claim, to extent of such default amount, on borrower's interest in all property used in concession operation.
10. The Secretary may adjust equitably franchise fee payments if he determines such action will facilitate repayment of principal and interest on loan, if such action of relief is requested by borrower.
11. To carry out objectives of the Act, the Secretary is authorized to make ~~rules~~ and regulations necessary to exercise the authority vested in him by the Act; to collect or compromise obligations held by him until referred, if necessary, to the Attorney General for suit or collection; to deal with and sell or rent real property acquired in connection with payment of loans; and to contract for hazard insurance or services or supplies in operation of property acquired as result of loans if premium for the amount does not exceed \$5,000.
12. The Secretary may delegate any and all powers conferred upon him by this Act to such agency, administration, or office of the Federal Government as he may consider appropriate.
13. The Secretary is authorized to procure the temporary service (not to exceed 6 months) of experts, consultants, or organizations, including stenographic, by contract or appointment without regard to civil service and classification laws, and, except stenographic reporting services by organizations, without regard to Section 3709, Revised Statutes, as amended (41 U.S.C. 5).