

THE ROLE OF FUTURES FORECASTS IN RECREATION:

SOME APPLICATIONS IN THE THIRD NATIONWIDE

OUTDOOR RECREATION PLAN¹

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Abstract. -- This paper provides a quick glimpse into the theoretical applicability and importance of futures forecasting techniques in recreation policy planning. The paper also details contemporary socioeconomic trends affecting recreation, current recreation participation patterns and anticipated social changes which will alter public recreation experiences as developed in the Third Nationwide Outdoor Recreation Plan.

OVERVIEW OF FUTURES FORECASTING TECHNIQUES AND RECREATION

One of the best ways of discerning meaningful trends in recreation is through use of the techniques collectively known as futures research. Trend analysis specifically and futures research generally are important instruments to make policymakers aware of change and which ultimately help us deal creatively with change. However, the value to be derived from application of a futures perspective to recreation will depend on the degree to which it is possible to anticipate future events and also, the extent to which it is possible to respond to new circumstances. If a society can clearly map out the future, but cannot plan for or react to that future's environment, then it is debatable whether information about the future is of much value.

Where there is a slow rate of change between the past and the future, society can maintain relatively rigid mechanisms

and can largely ignore the future. In such situations, dislocation costs can be spread over a lengthy period of adjustment. As we enter the 1980's, we find ourselves in a situation where the rate of political, technological and cultural change in the world is quickening, and the future is placing its assertive demands on the present. We are entering a period of profound social change which affects recreation as well as the rest of the fabric of American society. The present recreation picture is changing rapidly and future patterns are likely to be equally divergent. The ability of our society to adapt to meet these new social needs hinges not so much on sophisticated technological innovation as on institutional and societal innovation.

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In order for futures research in parks and recreation to have any impact, it must succeed in re-orienting decisionmakers away from short-term, reactive planning. Most decisionmakers place highest priority on those factors which relate to the immediate consequences of their actions while ignoring long-term consequences. Herbert Kahn (1967), perhaps the dean of futurists, suggests that the objectives of futures research should be, "...to put policy-makers in a position to deal with whatever future actually arises; to be able to alleviate the bad and exploit the good.

While we may not agree with Epicurus that, "No means of predicting the future really exists," we must recognize that our tools of prediction are crude at best. Nevertheless, the challenge of planning for the future is such that we must proceed regardless of the limitations of our current techniques. We must also recognize, as many futurists already have, that futures research and trend forecasting are more of an art than a science. As Solomon, Marstrand and Page (1975) point out in their lively book, The Art of Anticipation, "Forecasting is an uncertain exercise, plagued with fallacies, uncertainties and ignorance. It cannot aspire to be called a science and it must avoid the dangers of pseudo-science. It requires an imaginative synthesis between what is known and what is indefinite. This is properly described as an art or a craft."

To summarize, the art of future speculation can offer glimpses of symptoms of the future which can alter the perspective of decisionmakers -- to encourage them to invest in decisions which will deal with future conditions as well as present or past conditions. This preparedness for future events has become more relevant now than it was in the past, due to the current rate of change which increases the need to make decisions about diverse conditions and increases the costs of bad decisions and non-decisions for society. The park and recreation movement is a vital part of society and includes people who believe in improving the quality of life. To believe in this concept and to operationalize it requires that individuals bring flexibility into existing institutions.

APPLICABILITY OF FUTURES FORECAST IN HCRS RECREATION POLICY PLANNING

The creation of the Heritage Conservation and Recreation Service (HCRS) in 1978 reflected such a commitment on the part of the Carter Administration to improve the making of public policy for recreation, natural resource protection and historic preservation. Advocacy of the National Heritage Policy Act; protection of Barrier Islands; improved administration of both Federal and State sides of the Land and Water Conservation Fund; implementation of the Urban Park and Recreation Recovery program; and preparation of the Third Nationwide Outdoor Recreation Plan all indicate HCRS's attempts to anticipate future needs.

However, futures forecasting has different meanings and operates toward different goals depending on the level at which it is developed. Obviously, the forecasting needs of an individual park manager are very different from those of an administrator responsible for overseeing many varied facets of park and recreation planning. Strategic long-range planning and policymaking in HCRS's business requires some indication about what conditions will prevail several years hence.

The most important requirement of such long-range futures forecasts is that they capture the unexpected. Many things will certainly continue in rather predictable patterns. However, it is the unexpected development, often produced by the interaction of predictable existing patterns that is most elusive. The value of these more speculative types of long-range futures forecasting is that they attempt to predict the "unpredictable" types of events which have sweeping effects on established trends. The techniques used in these exercises are usually based on more imaginative, subjective processes as opposed to structured, quantitative ones.

It is difficult to know how to recognize a valid forecast amidst the many wild guesses. However, the main value of long-range forecasts is not in their accuracy. There are simply too many intervening events to be able to describe

with any great degree of precision what, for example, the nature and use of national parks will be in twenty-five years. The value of long-range forecasts and studies of recreation trends lies in their ability to sensitize planners and policymakers to the ranges of possibilities that await them just beyond the horizon of what can be predicted or foreseen. Although accuracy in terms of timing and magnitude of events is desirable, the prime objective of long-range futures forecasting is to reveal the full spectrum of possibilities that might be realities in five ten, twenty or thirty years.

This is particularly relevant to those of us in the Federal government who are guardians of the public trust in administering public lands for park and recreation purposes. We have the responsibility to ensure that the public values presently preserved and enhanced on these lands survive to be used and enjoyed by future generations. Forecasting is also important because the development of a single park, from first conception, through land acquisition, to eventual recreation development may take up to twenty years to complete. Long-range forecasting will become even more relevant to park planners and managers in years ahead as fiscal compression increases, as our nation's natural environments are depleted and transformed, and as all basic land use decisions take on still greater importance.

Keeping in mind that each of us will spend the rest of our lives in the future, many of us actively shaping recreation policy, we would like to share with you some of the insights and accomplishments of our new Nationwide Recreation Planning Process, which culminated on December 11, 1979 with the President's transmission of the Third Nationwide Outdoor Recreation Plan to the Congress. Within the limits of existing information, this Plan's Assessment sought to discern many trends in contemporary recreation, and to anticipate future trends. The Plan's Action Program developed responsive policy options to ease the transition of recreation into the future in America.

Before proceeding with a discussion of the findings of the Plan's Assessment, it is important to say a word about the data sources used in this document, as well as

about the general limitations on data in the park and recreation field. Inconsistent or nonexistent data bases place real limits on the degree of accuracy that is possible in trend analysis.

As you are perhaps all well aware, data collection and evaluation in the park and recreation field are not as strong as they should be. At the national level, data is incomplete, out of date, or simply unavailable. There is also wide variation between agencies and recreation professionals over what quantitative and qualitative measures are most appropriate as indicators in the recreation field. The long-standing debate over qualitative recreation output measures epitomizes this problem.³ Therefore, the production of accurate, longitudinal data on recreation and its relation to important national concerns is a critical long-range need.

Variability in available data bases and their aggregation made the preparation of forecasts for the Assessment somewhat problematic. Nevertheless, in the relatively short time frame of two years, a compilation of the best available information was made. We were forced to rely heavily on non-park and recreation sources for key trend information. First and foremost, however, we used data from the latest Nationwide Outdoor Recreation Survey, completed in 1977. The data collected during the survey show the relationship between

³ In the area of quantitative measures, while agreement now exists among Federal recreation agencies to use "recreation visitor days" or "visitor hours" as the basic unit of recreation output measurement, there is still no standardization of data collection techniques. In the area of qualitative measures, there is considerable disagreement as to how to measure the quality and cost-effectiveness of recreation outputs. While some qualitative values can be measured in economic terms, noneconomic benefits pose difficult measurement problems. These and other related problems were discussed at a recent "Workshop on Recreation Output Measures" held December 11 - 14 at Harper's Ferry, W. Va. The workshop proceedings will be published sometime during 1980. [personal communication, Beverly L. Driver, USDA-Forest Service Experiment Station, Ft. Collins, Colo.]

certain socio-demographic variables such as age, sex, education, income, etc. and rates of participation in selected outdoor recreation activities. One component of the survey involved a subsample of 14,000 interviews with visitors onsite at 155 Federal recreation areas. Many of you may be interested in the findings which compare public recreation use between the different recreation-providing Federal agencies.

In addition to survey data which was analyzed and interpreted, significant trend information was distilled from various reports prepared by the U.S. Census Bureau on such parameters as population projections, geographic mobility, family size, etc. Planning studies, research reports and data provided by the key recreation-providing Federal agencies were studied for evidence contributing to trend analysis. Reports and policy documents from other Federal agencies were also scrutinized. Significant recent findings of the Departments of Labor; Health, Education and Welfare; Transportation; Agriculture; Commerce; and others were included.

In the next few years HCERS will seek to improve still further the collection and analysis of meaningful data on national recreation trends. While improved data collection will clearly benefit many in the park and recreation field, at least part of the argument for more refined data is based on a somewhat selfish motive. If we assume that more decisions will be subjected to powerful public and political scrutiny, then we need refinements in the policy planning information base in order to help withstand criticism.

CURRENT TRENDS IN RECREATION

The number of participants in outdoor recreation has grown substantially, and their demographic make-up has changed to include people with significantly different social and economic backgrounds than those of recreationists in years past. The qualitative changes in the recreating population reflect more than just a higher standard of living and expanded leisure time; they can also be attributed to a redefinition of society's values, new economic forces, and advanced technology. Recreation managers and policy makers must be aware of these evolutionary cultural changes if they hope to grasp

the nature of contemporary recreation trends and their implications for the future.

Numerous changes in the number, location, character, and recreation interests of America's recreationists are occurring and will be likely to continue for the next ten years. The 1977 Nationwide Outdoor Recreation Survey reveals that recreation continues to be an activity of great importance to most Americans. Eighty-six percent of Americans surveyed indicated that recreation remains one of their most important interests. Other surveys show that some 90 million adult Americans engage in recreation activities on a regular basis.

The latest available figures also show that recreation is of tremendous importance to the national economy. Recreation expenditures now account for nearly \$200 billion. This amount dwarfs the five to seven billion dollars of Federal, State and local public expenditures spent annually on recreation. Nearly \$1 out of every \$8 spent by consumers went for recreation. In addition to its burgeoning economic impacts at both national and regional levels, recreation contributes significantly to maintaining the physical and mental health of Americans. This contribution is only beginning to be adequately appreciated.

The sharpest changes in recreation participation in the future are due to broader underlying demographic trends. Our nation's population is aging steadily and future recreation planning must adapt to meet new demands. The median age of Americans will rise steadily over the next twenty to thirty years as the post-World War II "baby boom" age cohorts move into maturity. The median age will top 30 years in 1980 and reach 35.5 by the year 2000. All of this will bring important changes in recreation. Birth rates are expected to remain low, so that the numbers of those in so-called "prime recreational years" from 12 to 25 will continue to decline through the year 2000. However, the increasing emphasis on physical fitness will likely extend the life cycle of popularity for many activities even past the traditional ages of declination.

Inevitably, recreation planners will face the needs of an older population which is

healthier, interested in recreation, retiring earlier, living longer, and one with more available income than its predecessors. The Census Bureau reports that 65 year olds now exceed 23 million and projections indicate that this age group will increase by one-half million individuals per year over the next decade. While the recreation market for the elderly will sharply increase, many cities are still having difficulty providing adequate senior citizen recreation programs. More outreach and special transportation services are especially needed.

Recreation planning must also respond to changes in the population's location. The Census Bureau has documented the shift in population from older, industrialized areas of the Northeast and Midwest to Sunbelt States. These areas are expected to grow twice as fast as the Northeast and North Central States in the next twenty years. There is also a perceptible "back to the city movement" in many urban core areas, and more Americans than ever before, some 72 percent, make their homes in urbanized areas. This trend will continue to put pressure on park and recreation systems to expand their land and facilities in new, growing areas and to maintain existing land and facilities through innovative measures in declining areas.

Other important socioeconomic trends affecting recreation include the following. The average household size is declining, divorce rates and the number of unmarried couples continue to grow simultaneously, all impacting the family unit, traditionally the mold of an individual's recreation participation. Today, there is a greater need than ever before for recreation to play a stabilizing role, to provide a sense of community and family for those lacking this structure.

There are also substantial increases in the pursuit of high-risk recreation activities among young adults. Sports activities such as rock climbing, hang gliding, scuba diving and off-road vehicle use are examples of this trend. Sociologists' attribute these tendencies to technological innovation in recreation equipment and the psychological benefits accruing to participants, such as relief from stress and boredom.

Sex-related differences in recreation participation are rapidly diminishing. More women than men are now starting many recreation activities. This sex-based equality

is particularly evident among the young where women are actively participating in many sports traditionally dominated by men. Women's participation in high school and college athletics is also showing steady growth spurred by Title IX. This trend will likely boost still further the sales of recreation equipment, particularly for those products directed to women's markets.

Other factors likely to affect recreation in the years ahead are income levels. Rising amounts of disposable income have fueled the current leisure industry boom and there is good evidence that expenditures for recreation and leisure activities are rising even faster than consumer spending as a whole. Although real income levels may taper off due to inflation and stagnant productivity, a countervailing trend is the growth of dual income households.

Americans also have more leisure time now than ever before, and are better educated than at any previous time in our nation's history. Much of this additional leisure time is being devoted to recreation and there is a clear correlation between higher educational levels and greater recreation participation. Americans now have larger blocks of holidays and vacations in part due to smaller families, a shorter work week, and time-saving technological innovations. There has also been a continuing decrease in the proportion of an individual's life spent at work, a trend supported by extended schooling periods, earlier retirements and shorter working hours. Results from the 1977 Nationwide Outdoor Recreation Survey show that participation in recreation activities will continue to diversify and grow. According to data on new starts, the ten activities showing the fastest growth are: cross-country skiing, downhill skiing, tennis, sailing, snowmobiling, water skiing, canoeing/kayaking, golf, off-road vehicle use, and horseback riding. Similarly, those with the highest potential for growth are: downhill skiing, tennis, water skiing, horseback riding, cross-country skiing, tennis, primitive area camping, sailing, golf, snowmobiling and canoeing/ kayaking.

Our colleagues in the USDA-Forest Service (1980) have come up with projections of recreation participation stretching out to the year 2030 which show that while recreation will grow substantially, snow-based recreation activities will grow the fastest, followed by water and then land-based activities. Factors such as the antic-

ipated growth in population, income, and education all contribute to the projected increases in outdoor recreation participation. However, these increases will not be as great as the extremely large growth in participation experienced during the 1960's. Several factors which may further dampen these growth rates are: the population's changing age structure and rising energy costs.

Our analysis in the 1977 Survey of Federal estate visitation to national parks, forests, wildlife refuges, recreation areas, historical sites, Corps of Engineers lakes and reservoirs, and other Federal resource lands, clearly shows that users of Federal recreation areas are not a representative cross-section of the general population. Users of the Federal estate have higher levels of income and education, and are considerably older than their average counterparts in the general population. This disparity is most evident for visitors to National Park System sites (HCRS, 1980).

Also, since most Federal recreation areas are located more than 100 miles from the majority of the American population, a significant percentage of Americans cannot easily reach Federal recreation areas regardless of whether the areas are located in the West or the East. The 1977 Survey shows that these travel distances vary dramatically among the ten Federal regions. The Survey also shows that recreation on the Federal estate is largely a group activity, and that most groups contain children. In addition, the larger a group is, the more likely it is to stay at the site for an extended visit.

The reasons visitors choose particular Federal areas vary dramatically. Corps of Engineers' visitors cite the availability of good facilities; Forest Service users cite scenic beauty; and National Park System visitors are most likely to cite a desire to visit new areas. The most popular activities at Federal recreation areas are closely related to natural features of the landscape, with sightseeing and camping topping the list.

Users of the Federal estate share a similar concern with the general population over lack of time and crowded conditions as the key constraints or deterrents to participation. Of those expressing dissatisfaction with the Federal estate, half of all complaints centered on facilities. Many of the

unmet expectations expressed by visitors, such as low water levels in reservoirs or inability to view wildlife, cannot be readily corrected by agency managers.

While many of the projections for recreation point to increasing although moderate growth, recent developments concerning energy costs cast doubt on these forecasts. Recent oil price increases, last summer's spot shortages, and the prospect of still higher prices, inflation, and intermittent shortages for the foreseeable future lessen the chances for sharp growth increases in outdoor recreation. Although verified quantitative relationships have not yet been fully established, economic analysis of fuel costs and the amount of travel undertaken indicates that a negative or inverse relationship exists (Goeldner et al. 1975). Since most Federal and regional destination recreation areas are oriented to visitors traveling by private car, use levels will continue to respond to gas prices and supply effects. The best current evidence suggests that future increases in recreation participation will be determined, as many other items in the consumer budget will be, by the relative price and income elasticities of household energy and travel expenditures. Energy problems will also affect public park and recreation management.

While personal mobility increased tremendously in the past three decades, the 1980's loom as a period of adjustment to scarcity of available energy resources and pose the imperative to utilize energy more efficiently. Other key trends in recreation as a result of energy instabilities include the following. Fuel costs will rise and supplies will tighten still further. All facets of recreational travel will become more expensive. The public will take fewer and shorter recreation trips. More recreation will take place at alternative sites close-to-home. Lower and middle-income groups will be affected most severely by higher prices and reduced mobility. Demand for alternative transportation modes to recreation opportunities will increase, particularly for transportation to remote recreation areas.

Reductions in visitor use of more remote national parks, national forests and other congressionally designated recreation areas is particularly likely. Adverse effects will also occur at those parks or recreation areas that feature energy-intensive forms of recreation. The economic effect of such use reductions will strongly affect the

travel and recreation industries. Conversely, substitution effects will increase visitor pressure and public demand at large urban or regional parks as well as at those recreation areas which are within 100-300 miles of major metropolitan areas.

The public is also likely to take more group-type vacations. There will be increased recreation planning attention for those who cannot afford cars; and increased development of, and consumer investment in, more efficient recreation vehicles and automobiles. Experts also expect a return to destination-type recreation facilities and a consequential concentration of travel patterns.

It is probable that the national search for new energy sources will degrade the quality of some recreation areas and increase pressure to allow energy resource exploration and development in wilderness areas, national parks and other protected lands. Park and recreation agency involvement with energy conservation and alternative energy resources to help meet operating needs will also increase.

While all of the Assessment's trend data cannot be summarized in this limited paper, other important trends affecting recreation as analyzed in the Assessment are also briefly developed. In the area of government park and recreation services, fiscal constraints will cause reductions in staff and curtailment of programs. The price of prime recreation land will continue to rise and funds available to purchase lands will fall short of demand, particularly in urban areas. There will be increased development of more innovative less-than-fee land protection and acquisition techniques as well as greater imposition of recreation fees. Provision of economic incentives to motivate land owners to open lands for public recreation will grow and innovative urban recreation spaces will be utilized increasingly; for example, waterfront redevelopment, industrial area reclamation, and redesign of deteriorating parks. There will be growing recognition of interdependence between private and public sectors, producing a rethinking of traditional business relationships, including changes in concessions policies, and increased reliance on government use of contractual services. Construction of new facilities which lack long-term operations and maintenance commitments will probably decline, while better techniques of fiscal management in recreation administration rapidly develop.

For natural resource management, the future looms as a time of better understanding of ecological factors affecting resource-based recreation areas. There will be greater reliance on park, forest and land inventories to grasp resource management challenges. Resource managers will be better trained in integrated management to help cope with multiple use conflicts and carrying capacity limits. However, there will be increased control over public recreation usage in natural and developed recreation resource areas through time and space rationing. Greater conflicts between recreation and non-recreation uses of lands, and heightened conflicts between different types of recreation users are also likely. Some decline in the quality of recreation experiences due to congestion and over-crowding will probably occur although public recreation activities such as nonconsumptive uses of wildlife will continue to grow.

Several changes in public participation in park and recreation agencies are also likely. Institutionalization of improved public participation processes will occur at the local level. There will be greater involvement by private non-profit groups in the provision of public recreation services through contractual arrangements. Involvement of volunteers, the handicapped, the elderly, and minorities in the design of recreation services and the management of services will grow. There will also be greater information dissemination to the public and the institution of new public input mechanisms in the Statewide Comprehensive Outdoor Recreation Planning process.

The growing diversity in public recreation demands caused by market diversification, specialization, and segmentation will affect the private sector in years to come. The private sector is likely to play a still greater role in meeting new recreation demands. The private sector will increase technological innovation in recreation equipment to conserve energy and raw materials while simultaneously enhancing the public's recreation experiences. Foreign tourism will grow even more due to favorable exchange rates and the range of America's scenic, recreational and historical attractions. There will also be an increase in industrial recreation or opportunities at the workplace due to recreation's positive effects on productivity.

CONCLUSION

While all the trends and issues described in the Third Nationwide Outdoor Recreation Plan's Assessment are not repeated here, it is clear that more precise information about the future is still needed. Accurate long-range forecasting will require availability of adequate time and resources to do the job conscientiously, and managerial commitment to the use of forecasting as a means of keeping sensitized to the need for changes. While we are beginning to get a better grasp on many of the structural trends unfolding in recreation, more information is still needed. There is a great need for better "user-needs" assessments to reveal latent public demands. Better data on regional recreation differences is also needed so as to anticipate the spatial distribution of new recreation demand.

Despite many pessimistic projections, these are dynamic times for recreation and creativity is essential to galvanize future actions to strengthen and support recreation. Recreation has increased stature in public policy discussions due to the growing use of recreation and park development to meet economic objectives, community revitalization and health promotion needs, among others. Even though Epicurus was right when he said, "No means of predicting the future really exists," futures forecasts are one important tool to help illuminate future trends and possibilities for policymakers. The projections of recreation's importance in the 1980's, developed for the Third Nationwide Outdoor Recreation Plan, leave one with reason for optimism despite the difficult challenges they pose for public recreation agencies.

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