Demand for Recreation - An Essential Tool for Resource Planning

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After two years further graduate study at the University of Minnesota, he joined the Parks and Recreation Division of the British Columbia Forest Service as a Research Assistant. He was in charge of the recreation research program of the National and Historic Parks Branch of the Department of Indian Affairs and Northern Development in Ottawa from October 1961 to July 1968, and from December 1967 to 1968 he was assistant chief of the Planning Division. He was appointed director, Research and Planning Branch of the Manitoba Department of Tourism and Recreation in July 1968. Mr. Taylor was chairman of the Research Committee of the Federal-Provincial Parks Conference from 1964 to 1968; and is chairman of the Research Committee of the Federal-Provincial Conference on Tourism.

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The method available to planners of parks and outdoor recreation areas have been revolutionized within the last decade. Whether or not the planners have made the most use possible of the new techniques is not clear. Certainly they would have had to re-orient their basic concepts and adopt a more sophisticated approach to the subject than had been possible in the early 1950's. The radical changes that have become possible in planning offer the best possibility of providing solutions to such conflicts as those between use and preservation that haunt park managers. These conflicts still burst forth into public debate from time to time. The means to find the solutions exist; planners must have the wit to use them.

The new approaches to planning are growing out of research techniques now being developed in the field of recreation. Contributions to these techniques are being made by workers from many academic disciplines. It is the purpose of this paper to trace the development of one aspect of the new methods; the study of the demand for outdoor recreation and particularly some of the methods by which demand may be measured and how the resulting knowledge could be utilized.

Many parks people claimed and some still claim, that the research techniques in recreation could not be accomplished. In moments of great condescension some maintained that even if the research efforts were successful they would be but scientific oddities. Parks existed in nature and no amount of sophisticated enquiry could change that fact. The large sums of money now being invested in this research indicate that there has been some success and that further success is expected. This success came about when people rather than natural resources became the focal point of study. Research into recreation demand will not assist in any way in the identification of another Banff. It will assist in guiding the development and use of such a park.

The great pressures that people placed upon the limited supply of recreational resources aided the cause of scientific inquiry. These pressures forced a re-examination of the methods by which parks were located and developed. Clawson[2] was one of the first to recognize in public that the possible demand for outdoor recreation would rapidly outstrip the ability of all areas to supply the space and facilities required. The problem resolved itself into such basic questions as whether all parks were alike, were they to be developed in like fashion, and were they all to be eroded by excess use. The logical approach was to determine what the pressures generated by an increasingly affluent society would be and what rational resource development policies could be established to achieve the joint goals of scenic preservation and recreational use.

Initial work in recreation demand was concerned with predicting the total number of visitor-days that a given area would be called upon to accommodate in a given year.[1] Under this concept all people or all groups of people visiting a park were assumed to be seeking the same experiences. In this way a market could be said to exist for a park such as Banff National Park. A later approach looked at the demand for each activity. Under this concept there was a market for camping, fishing, swimming, and so on. Demand was expressed in terms of a projected number of activity days for each activity. The planning problem became one of finding space and providing facilities to take care of the volume of use indicated by the projection. The nature of the task faced by the planner in these circumstances was stated succinctly by Ellis and Van Doren.[5]

> The planner concerned with recreational demand is faced with two tasks. One is the problem of measuring demand levels for various outdoor activities in the future. However, he must also determine what spatial distributions the demand may take. The recreational system for a given activity presents a spatial pattern resulting from a complex interaction among people, facilities, resources and space. A change in any one of these, such as the conversion of resources to facilities by planning action, will distort this pattern. It is very important the planners and others in the recreational field be able to determine in advance what shape such distortions are likely to have, what magnitudes they might be, and to evaluate whether the distortions are beneficial or not.

The State of Kansas[6] in a recent review of recreation concluded that:

> Two factors appear particularly significant in determining the future recreational needs of the state: total attendance and participation by type activity.

A study carried out by the University of Utah for the State Planning Program[9] examined the participation ratio for individual activities. The survey covered a random sample of the state's adult population.

A third course for measuring recreation demand is now beginning to gain recognition. Instead of looking at total volume of visitors or at the expected participation in individual activities, interest is being focussed on the mix of activities that constitute a given recreational experience. Johnson[7] put the problem this way:

> We have had trouble understanding the demand pattern stemming from the Commission's focus on individual recreation activities. Its studies measured use ... and use (or participation) in one year. Changing interests in the recreation product-mix are inadequately reflected in projections made from this static base.

In a slightly different context Wolfe[13] concluded a study on recreational travel by noting:

> A final point: It is extremely likely that the patterns of highway use are markedly different for cottagers, campers, day-visitors, and commercial guests. If this proves to be true, it is easy to see how complex the problem becomes of predicting the effect of a new highway on traffic patterns. The mix will be different, the traffic patterns will be different.

The key to the proper framework within which to study recreational demand was first outlined by Clawson.[1] At that time he developed the concept of the recreational experience which he defined as a package deal. It is now clear that the demand for any particular park which is, after all, a complex of resources and facilities is a number of different demands made up of the variety of activities that people may participate in at the site.

If we assume a park that offers facilities (or opportunities) for camping, swimming, picnicking, water-skiing, fishing, hiking, and wilderness travel, we can hypothesize several demand schedules.

First of all there will be the demand for the park as a whole. This demand will show the total number of visitors that may be expected under certain conditions of development and accessibility. It will not give a clear picture of the pressures that will be placed upon any given facility within the area. A second set of demand schedules will predict the pressure for each individual activity within the area; it will not tell us how the different activity demands relate to each other.

It is very likely that the demand for each of the various combinations of activities that are possible will be different. If this assumption is correct, then the demand for long-term camping and fishing will be different from that for long-term camping and swimming and so on. A demand for long-term camping will tell little about the other variables included within the experience and could in effect, provide misinformation which would result in faulty planning and development—a misallocation of the resources available. Demand information developed on this approach should be the major product of any demand study.

We are thus faced with the obvious conclusions that each park or recreation area serves a variety of markets. While it is true that a general market for recreation could be described in the same way that an automobile market can be illustrated, such a market only sets the broad parameters within which the individual entrepreneur or manager must operate. As the automobile market is subdivided by such items in a variety of combinations as body type, body style, engine type, engine power, color, size, power accessories, radios, tape recorders, and so on, the recreational market is broken down into a wide variety of activity and interest combinations that constitute the particular experience sought at any given time.

A family's or an individual's preference for a particular automobile combination probably changes very slowly over time. The same group's preference for a recreational experience can change quite radically. The experience sought in a few hours afterwork on a summer evening will be different from that sought on a Sunday, on a weekend or on a vacation. Thus a group may constitute part of several recreational

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markets at approximately the same time. In the analysis of data collected through the various facility-user studies being done as part of the Canadian Outdoor Recreation Demand Study, the combination of activities participated in during a particular visit will be examined. The analysis will be in terms of relating activity complexes to type of trip, type of accommodation, length of stay and socio-economic characteristic of the user. The detailed analysis may indicate that some of these variables are not significant, but until the analysis has been carried out, they cannot be rejected.

The variety of data being collected and analyzed will permit the development and testing of a number of mathematical models. The use of models in recreation research is relatively new but the results that have been obtained to date indicate that such a procedure can be extremely useful. The early models developed by Clawson,[2] Trice and Wood,[11] Ullman and Volk[12] and Taylor[10] were based largely on population and distance. More variables have been added through the work of Knetsch,[8] Ellis and Van Doren[5] and others. In a slightly different context, the work of Crampon,[4] Wolfe[13] and Comes,[3] indicate the application of similar principles to the wider field of all recreational travel.

Before an adequate system of park and recreation areas can be planned and developed, it will be necessary to identify as many of the separate markets as is possible. It is through the development of suitable models that the multiplicity of markets involved will be defined. This identification will only come about over a long period of time but the eventual goal should never be lost. As the markets become known and the mechanism by which they operate are understood, it will be possible to make more rational allocations of resources to recreation. The differentiation between areas on a functional basis will be possible with the result that some areas will be able to be set aside for preservation while others will cater to more active recreation.

In addition these models will make it possible to test in advance the effects of a change in any of the related variables. The resulting information will enable planners to try out changes they propose, and also to be prepared for changes in pressures on the resource that may be caused by factors beyond the control of the particular agency concerned.

Parks which are dedicated for one specific purpose now have to be used for many purposes. The stated objectives of the area set forth one goal, the actual practices in the area often indicated something quite different. The end product is confusion in the public mind and disputes between managers, groups of visitors and commercial interests. These dichotomous, trichotomous, or even worse situations will haunt park planners and managers until there is an understanding of the market mechanism. The subsequent translations of that understanding into a system of parks and recreation areas that will provide the widest possible range of opportunities as a reflection of the markets should be the goal of all park planners. There are broader applications of the concepts of recreational demand than in planning a system of park and recreation areas. The same principles apply to any aspect of the use of leisure time. People who are charged with the management of a community recreation program, of a cultural program, of a tourist development program, face exactly the same problems as do those who must manage the outdoor recreation areas. They are vitally interested in the markets they serve and can serve; how to measure them and how to predict their future behavior as changes are made in any of the variables that play upon the market operation.

In all cases they serve a multiplicity of markets. There is not a single tourist market any more than there is a single park one. There are a great many markets, each requiring its own particular product combination for the satisfaction of the people involved.

Hence when conferences such as this one are held to discuss a particular kind of park, the participants must not only look inwards at the particular object under examination, they must also look outward at the broad spectrum of leisure. Unless they take this broad look their approach to the problem may well be myopic. Each of the many constituent parts of leisure is important enough for independent study and discussion, but the wider perspective must be maintained, lest the whole pantheon of relationships that exist within leisure be overlooked.

The decision of an individual or a group to enter a particular segment of the leisure market at a given time is the result of the interplay of many variables, some known and some unknown. At times the decision may be to attend the theatre, to go swimming, to stay home. The result of any decision is to place a demand upon a particular complex of facilities and resources and not to place a demand upon all others. It is through an understanding of how these individual decisions reflect in group activity that effective plans and development for the use of leisure time will be achieved in an age where the problems of leisure and the means to utilize it are of increasing, possibly of vital importance.

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