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Public Decisions on Public and Private Outdoor Recreation Development

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The outdoor recreation industry is a complex mixture of public and private facilities. Some private facilities are profit oriented while others are non-profit and operated by churches, youth groups, membership clubs, and similar organizations. Public operations are operated by every level of government, federal, state, county, and local. Both public subsidy of private facilities and private subsidy of public facilities are common. The three sectors sometimes compete directly with each other by providing similar facilities to the same market.

The objectives of the three sectors differ. The profit sector clearly has the objective of maximizing net income of the operator and responds to apparent opportunities to do so. Facilities in the non-profit sector are usually developed by a group for use by members of the group. The objective is generally the provision of the desired recreation experience at minimum total costs. The public sector responds to political forces and has the objective of providing the facilities desired.

This mixture in the industry is the result of gradual historical development as observed needs were met by responses in the three sectors. Activity in each of the three sectors has expanded rapidly in recent years as the result of increasing demand for outdoor recreation facilities based on increases in population, leisure, and income. Activity in the public sector, in particular, has increased substantially. As a result, public officials and legislators are making many decisions concerning the increasing role of government in the supply of outdoor recreation facilities.

The objective of this study is to develop a set of guidelines or criteria for use by public officials in making these decisions. Emphasis is placed on defining the circumstances in which government should provide and manage facilities and conversely when the job should be left to the private sectors, perhaps stimulated by government subsidy and other inducements. The project was initiated after several state outdoor recreation plans were published which gave little or no recognition to the role of the private sectors. Since the private sectors are major suppliers of facilities and can be expected to increase

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1/ Associate Professor and Graduate Assistant, respectively. Some of the material in this paper is based on work done by James Angus.

their supply as demand increases, such plans seem to provide an incomplete base for continuing public decisions.

The study starts by examining the existing relationships and differences among the three sectors in a selected area, the three counties in Massachusetts which straddle the Connecticut River and its valley. Criteria for public action were developed from study of existing conditions in the selected area, historical justifications for public involvement in outdoor recreation, and the theoretical conditions for public intervention in the market system.

A basic assumption of the study has been the desirability of supply of the private sectors as a first choice. Only then the private sectors do not respond to an existing or potential demand, or when they respond in an unsatisfactory manner as defined by the democratic process. is public action assumed to be desirable.

Outdoor Recreation in the Study Area

The study area was selected to represent a variety of outdoor recreation situations. It includes a major metropolitan area (Springfield) and some of the most rural areas of Massachusetts. It has many and variable recreation resources including the river, lakes, exciting topography, large wooded areas, and many man-made recreation facilities. It does not include ocean beaches or federal recreation areas.

A total of 330 separate outdoor recreation operations which fit the definition established for the project were found in the three counties in 1966. For analytical purposes, three were grouped into eleven categories according to dominant recreational activities. Profit operations were found in ten categories, non-profit in nine and public in seven. Its categories had operations in all three sectors (Table 1).

Of the 330 operations, 41 percent are in the profit sector, 37 percent in the non-profit sector, and 22 percent in the public sector (Table 2). Of the total hours of use (26,900,000), 46 percent were reported by profit, 25 percent by non-profit, and 29 percent by public operations. In contrast to the similarities in these two measures, only 13 percent of the 64,800 acres[2/] available for recreation was found in the profit sector, 26 percent in the non-profit sector and 61 percent in the public sector.

These data provide a general indication of the magnitude of each of the sectors. The profit sector is the largest as measured by both number of operations and hours of use. The two private sectors together include over three fourths of the operations and almost three fourths

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2/ This is about six percent of the total land area in the three counties.

of the use. The public sector, on the other hand, has almost two thirds of the land.

Table 1
Number of Operations in the Outdoor Recreation Industry in the Connecticut Valley Region of Massachusetts, by Activity Type and Sector, 1966

Activity Type	Sector			
	Profit	Non-profit	Public	Total
Day camps	7	17	5	29
Parks-land activities	5	4	15	24
Parks-water activities	16	5	13	34
Parks-land and water activities	22	19	31	72
Golf courses	19	16	3	38
Ski areas	9	2	1	12
Campgrounds	13	-	4	17
Residence camps	9	17	-	26
Riding stables	20	2	-	22
Sports clubs	-	42	-	42
Golf driving ranges	14	-	-	14
Total	134	124	72	330

Table 2
Relative Size of Three Sectors in the Outdoor Recreation Industry in the Connecticut Valley Region of Massachusetts, 1961

Sector	Measures of Size		
	No. of Operations	Hours of Use	Acres of Land
		(Percent)	
Profit	41	46	13
Non-profit	37	25	26
Public	22	29	61
Total	100	100	100

Some observations on the differing nature of the three sectors as they currently exist can be made by reference to Tables 1 and 2. Operations involving a large non-land investment and/or a large management input are generally not found in the public sector. This is illustrated by riding stables, ski areas, resident camps, and to a lesser extent, golf courses. Analysis within the three "park" categories also

shows the private sectors with larger non-land investment and a more intensive use of facilities which probably indicates a greater management input.

The public sector is supplying facilities in which land itself is the dominant investment and where the management input is relatively low and standardized. These operations tend to provide facilities for activities which make extensive use of land suchas hiking and consequently, provide low use per acre figures. As is shown in the table, however, this type of operation is not limited to the public sector but is found in all three sectors. The private sectors seem to provide examples of every type found in the public sector but the reverse is not true.

These data clearly indicate that the two private sectors dominate the industry in these counties. Public policy based on the assumption that the government must do most of the job of supplying facilities for computer recreation clearly does not recognize the current situation nor the potential of the private sectors.

Sources of Support and Cost of Services

A judgment sample of 40 typical operations was selected to provide financial information on the industry. A sample of this size from such a highly variable population is probably insufficient for firm conclusions but it does indicate the probable differences among sectors.3/ Of particular interest to this study are intersectorial comparisons of sources of support and costs of services.

The three sectors show distinct differences in their sources of support (Table 3). This should not surprise anyone but the measurement of these differences should help develop an understanding of the financial structure of the industry.

In making comparisons of sources of support, capital investment and annual operating income were analyzed separately. Among the 40 operations, the profit sector obtained 100 percent of the invested capital from private sources. Two thirds was owned and one third borrowed. In the non-profit sector, about half the capital was owned. Most of the other half was contributed while six percent was from grants and two percent was borrowed. Capital in the public sector was supplied primarily from tax sources but two percent came from private contributors.

The dominant source of operating income in the profit sector is the users of the facilities in the non-profit sector, users and

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3/ Financial data were obtained from the original sample without a single refusal.

contributors divide the responsibility, while in the public sector, the users and taxpayers provide the income with the taxpayers accepting nearly 60 percent of the total burden.[4/]

In summary, of both capital and operating costs, users pay for the facilities they use in the profit sector. In the non-profit sector, users pay slightly over half the cost of their facilities with the remainder of the cost subsidized primarily by contributors with some help from government. In the public sector, users pay a small portion of the cost but most is paid from government funds.

Table 3
Sources of Financial Support, by Sector,
40 Outdoor Recreation Operations
in the Connecticut Valley Region of Massachusetts,
1968

Sources of Support	Investment			Annual Income		
	Profit	Non-profit	Public	Profit	Non-profit	Public
			(percent)			
Taxpayers	-	6[a]	98[b]	2	2	58
Users	-	-	-	98	55	42
Contributors	-	43	2	-	43	-
Private Capital (owned or borrowed)	100	51	-	-	-	-
Total	100	100	100	100	100	100
No. of Operations	16	12	12	16	12	12

a/ Grants
b/ 85% grants, 13% loans

A comparative picture of the cost of the recreation experience among the three sectors is elusive. The 12 to 16 observations in each sector are available but they encompass up to nine different activity categories and substantial variability within categories as well. Generalizations based on the data must remain tentative. Because of the different costs involved from category to category, comparisons must be intra-category only. An additional problem is that the cash payment for labor differs from operation to operation. The public and non-profit sectors generally must pay cash for all labor and management

4/ In the profit sector, annual income is expected to be sufficient to cover the cost of invested capital and its depreciation while in the other two sectors, this is not generally expected.

while in the profit sector, labor and management may be supplied by the owner and his family and not be shown as an input cost in the accounts of the business.

The data on facility cost per patron hour is shown in Table 4. These cost figures include cash operating costs, calculated depreciation, and interest on the estimated current market value of the operation. The top cost per hour, exclusive of one abnormal public operation, is $6.95 at one private park with water activities. More typical costs are about $.50 per hour with several facilities reporting costs below this.

In each of the five categories with observations in all three sectors, two sectors have similar figures while the third deviates substantially. Day camps and parks with land activities only show higher figures for the non-profit sector while it is the profit sector which is higher for parks with water activities and parks with both land and water activities.

Table 4
Costs of Supplying Outdoor Recreation Facilities Per Patron Hour Including Operating Costs, Depreciation, and Five Percent Interest on Estimated Current Market Value, by Sector. 40 Operations in the Connecticut Valley Region of Massachusetts, 1968

Type of Operation	Sector					
	Profit		Non-profit		Public	
	Number of Operations	Cost Per Hour	Number of Operations	Cost Per Hour	Number of Operations	Cost Per Hour
Residence camps	2	$1.03	2	$1.05	-	-
Day camps	1	.28	2	.80	1	$ .37
Parks (land activities)	1	.48	1	1.27	2[b]	.30
Parks (water activities)	1	6.95	[a]		2	.43
Parks (land and water activities)	3	1.41	3	.32	4	.27
Campgrounds	3	.22	-	-	1	.28
Riding stables	1	.54	-	-	-	
Golf courses	3	.32	3	1.15	1	.83
Golf driving ranges	1	2.38	-	-	-	

a/ Omits one operation with no estimate of current market value
b/ Omits one abnormal operation.

The profit sector is substantially lower than the other two sectors for golf courses.

Activity categories with observations in only two sectors (residence camps and campgrounds) have similar hourly costs in each sector.

Perhaps the major generalization from this data is that the public sector was not mentioned. In each category, it has an hourly cost figure similar to that in one of the other sectors. The hypothesis that public operations have higher costs than similar operations in the private sector is not supported by these data.

Criteria for Public Policy Decisions

With this information on existing conditions in the study area, criteria for public policy decisions can now be considered.

Given the conditions of perfect competition and the assumption of consumer rationality, the pricing mechanism of the market system secures an optimum allocation of resources. Deviations from these assumptions give rise to situations in which the allocation is less than optimal. In such cases, it is often possible for government to intervene in the market to achieve a more desirable allocation.

Musgrave[5/] lists several situations which call for public intervention to move closer to the socially desirable optimum allocation. Briefly stated, they are: monopoly control, other problems associated with decreasing cost industries, external economies or diseconomies, social wants, and merit wants (see below for definition). Criteria for public intervention in outdoor recreation will be based on this framework. Certain additional situations will be added to Musgrave's list.

Monopoly control problems appear to be particularly relevant to outdoor recreation although less common than might be expected. Sins of the recreational monopolist can be either those of commission or omission. Many unique natural areas have sufficient recreational value to enable a private owner to extract monopoly profits from users. Numerous examples could be cited, such as certain natural caves, but no situation of this type was found in the study area. A few potential areas such as Mount Sugarloaf are already publicly owned.

The sin of omission occurs when a private owner of a unique area denies access to the public. The most commonly cited example is that of ocean beaches. A large proportion are privately owned and held for the exclusive use of the owner and his personal guests (an invalidation of the consumer rationality assumption). Minor inland examples are numerous but most sites with major recreational value are likely to be either exploited or move into public ownership. The monopoly situation does not apply, of course, when the recreational value of a site depends on man's development through investment. This latter condition includes most private operations in the study area.

Musgrave's second situation of decreasing cost industries does not appear to be relevant to outdoor recreation.

5/ Musgrave, Richard A., The Theory of Public Finance, McGraw Hill, Inc. New York, 1959, pp. 7-9.

Externalities of both consumption and production have been used to justify public intervention in outdoor recreation in the past. Externalities of consumption refers to the possibility that the outdoor recreational experience re-creates the individual and calms his soul. The result, from society's point of view, would be higher productivity and a more stable and calmer society. Such social benefits would seem to be particularly relevant to our time.

There is little evidence that such consumption externalities exist.[6/] In any case, there are many other services such as symphony concerts, sports events, and bridge tournaments which would seem to have the same external benefits but which government does not support. In addition, some of the groups in our society most in need of the calming influence of the outdoors are those least likely to use the facilities. Consumer externalities, therefore, seem to be an unimportant reason for public intervention.

Producer externalities, on the other hand, appear to have more relevance. In many situations optimal resource use involves the integration of several simultaneous uses only some of which will produce income for the private owner. He is likely to concentrate on the single use which will maximize his own income and neglect other uses desired by society while public management of the site could be based on optimum multiple use. This situation would be associated most frequently with extensive woodland type recreation and with water impoundments. There are numerous instances of reduced recreation productivity of multiple use resources such as the unsightly results of some timber harvesting operations. Considerable acreage of this type of land, however, is already publicly owned in the study area. The Connecticut River is an example of a publicly controlled multiple-use resource where less than optimum allocation may exist because of the actions of private owners of rights to the river water.

Musgrave's category of social wants does not appear to be relevant to outdoor recreation. It is defined as including collective consumption such as national defense, or foreign aid, in which the consumption by one individual does not reduce the consumption by others. The consumption of outdoor recreation services by one individual does limit the consumption by others.

The last situation requiring public intervention is designated as merit wants by Musgrave. Examples of merit wants are subsidized housing, free education, public health services, and school lunches. Such wants are partially supplied by the private sector in response to demand. Such wants are deemed so desirable or meritorious by society, however, that government is asked to provide additional satisfaction over and above that provided by the market.

Outdoor recreation can be considered a merit want in these terms. Society apparently feels it wants such facilities provided by government

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6/ Clawson and Knetch, Economics of Outdoor Recreation, John Hopkins Press, Baltimore, 1966, p. 267.

in addition to those provided by the market. This argument, however, is difficult to use in developing operational criteria or to apply to a particular region. The nature and extent of such public provision of facilities seems to rest on the feelings and votes of the public and the legislators. Both the identification of merit wants and the extent they are to be satisfied by public expenditure seem to depend on directives provided by the democratic process.

Additional situations for public intervention not mentioned by Musgrave seem relevant to outdoor recreation. A number of activities such as hiking, nature study, boating, fishing and hunting require large amounts of land with low intensity of use. Not only is it difficult for the private landowner to exclude those who do not pay a fee but the free use of all land for such activities is deeply embedded in the American culture. Participants appear willing to spend substantial amounts of money on equipment and travel for such activities but are reluctant to pay for the resource which provides the recreation experience. A boat club in the study area, for instance, had 100 members with boats averaging $1,500 in value. The club's main problem was the collection of an annual $15 dock fee which was used to keep the docks in repair.

Because no income is received for such recreational uses, private owners fail to manage their land for them. The supply of facilities for these activities will become more critical as population increases and demand grows. The demand will be met either in the public sector or by adjustment of our institutional and customary arrangements to enable landowners to obtain income from such land uses.

Another argument for public intervention involves the scale of operation. Development of some facilities, such as major water impoundments, involve large and "lumpy" initial investment while patronage may develop gradually to the level of full utilization. The private sector is unlikely to provide such facilities because of the long and costly wait for returns. The public purse is in a stronger position to develop such facilities which are also likely to present multiple use opportunities. Other possible advantages for the public sector are possible lower interest rates, lack of real estate taxes and, sometimes, low cost prison labor. These, however, are the result of current institutional arrangements and could be changed in favor of the private sector.

A final situation calling for public intervention arises from the differences in time preference between society and individual land owners. Individual decisions are made on the basis of profits or benefits anticipated during the individual's lifetime. Often his planning period is shorter than this. Society, on the other hand, feels a responsibility to provide for the needs of coming generations when they can be identified and effective current action taken.

This situation appears applicable to outdoor recreation. Society may often find it desirable to acquire potential recreation land in danger of irreversably moving into other uses to protect the recreation interests of future residents. Such intervention and expenditure can be considered the payment of an insurance premium to protect future needs. This may involve the acquisition of unique natural areas in danger of destruction or of non-unique areas where a potential future recreational need is recognized.

A number of situations associated with outdoor recreation have been enumerated where the market may not lead to the development of facilities as desired by society. Public intervention seems desirable, therefore, in the following circumstances.

1. Where there is private monopoly of unique natural areas with high recreational value. Public intervention will prevent monopoly profits and/or public exclusion from the area.

2. Where there are resources with substantial multiple use potential where the private owner is likely to respond to market demand for only one use.

3. Where the land input is dominant and the suitable types of activity produce little or no income for a private owner.

4. Where private land use decisions conflict with society's acceptance of responsibility to provide for the anticipated needs of coming generations.

5. Where the merit wants justification applies. Such a situation does not require decision by public administrators but comes to them as directives from the legislative process.

Conversely, there seem to be at least two situations which the public sector generally avoids.

1. Where the non-land capital investment is relatively large.

2. Where the management input is relatively large.

Public intervention, of course, can take two forms. It can mean public ownership and management of recreation operations or it can mean public manipulation of the private decision-making environment to obtain more socially desirable private decisions. Both approaches are currently in use in the outdoor recreation industry. The second, however, has not been important until recently and public recreation plans might advantageously include consideration of its greater use.

Cursory application of the above criteria to the outdoor recreation industry in the Connecticut Valley Region of Massachusetts shows historical development similar to that suggested by these criteria.

Responsible officials in the public sector might consider moving the three golf courses, one ski area, and five day camps into the private sectors on the basis of the relatively high management and/or capital input. There could also be substantial additional public acquisition of minor unique natural areas and multiple use woodland, water and water impoundment sites. Some of this acquisition has been initiated.

Campgrounds probably belong in the private profit sector where many will be located close to large blocks of public land which patrons can use for some of their activities. There may be some situations where utilization of public lands depends on provision for overnight accomodations. In such areas, public or concessionaire campgrounds on public land may represent wise policy.

These criteria should provide a base for public decision makers. If a particular proposal for public intervention seems to fit the circumstances described in the five criteria above, it will usually be good public policy to proceed with implementing the proposal. In most other situations, the private sector can be expected to respond adequately to the forces of demand.