LANDSCAPE ASSESSMENT FOR TOURISM

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ABSTRACT

This paper describes a technique and conceptual approach to landscape assessment of regions for potential tourism development. To date, such development is allowed to grow in a haphazard manner, subject only to market exploitation of landscapes. This disregards important landscape characteristics and other factors important to integrated development for tourism.

Experimentation with this assessment concept, especially in a 20-county region of Texas, shows how it can be applied. Fundamentally, the concept follows practices of planning and landscape architecture but applies them to tourism as a special use. Both physical and program factors are researched and both narrative and computer mapping techniques are applied.

This results in an approach of value to site designers as well as planners and tourism decision-makers. By locating areas of greatest potential both protection and development policies and strategies can be established.

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INTRODUCTION

The intent of this paper is to demonstrate a new approach to assessing the national landscape for tourism development. At no time in history have as many lands been put to tourism use and yet the traditional approaches of haphazard exploitation of landscapes continues. As a consequence, landscape abuse and misuse increasingly erode the very assets for tourism. This need not be so.

For purposes here the landscape of tourism is defined as the total physical and visual environment utilized by all tourism activity. This broadens the meaning far beyond only profitmaking. It includes the whole of tourism development, such as transportation, services, information, direction and all the developments that attract people and give the incentive as well as the satisfaction to travel.

The following discussion focuses on a description of the concept and its application to a group of counties in south-central Texas.

THE CONCEPT

This concept is based upon the following sequence of assumptions or premises:

1. Tourism development is most frequently promoted because of its economic impact, derived through service businesses and facilities.
2. These service businesses depend upon flows of tourists who seek things to see and do -- attractions, such as parks, recreation areas, commercial attractions and events.
3. Attractions are primarily physical landscape developments that have been selected, designed and managed by a variety of specialists, owners and managers.
4. Attractions and many other important tourism developments depend, in varying degrees, upon both physical and program factors.
5. When these factors are identified, described and mapped, better assessment of future policy decisions can be made at both the regional and the site scale.

In other words, this concept goes beyond the popular belief that all land has equal potential for tourism development if promoted heavily enough. While promotion is an essential and well-exercised factor of contemporary tourism, other elements, such as the foundations of things to be developed and promoted, accessibility and location of prime service centers, are equally important. Long ago in the field of agriculture it was learned that land is not homogeneous. Certain lands have much greater strength of factors in the support of potential tourism than others. The concept, providing information on a regional scale, assists both private enterprise and governmental land use agencies by providing basic guidelines within which they can more logically make site selection and development decisions.

The following physical factors were derived from examining the range of tourist activities generally and the extent to which their development depends upon physical landscape conditions:

1. water, waterlife
2. vegetative cover, wildlife, pests
3. climate, atmosphere
4. topography, soils, geology
5. history, ethnicity, archeology, legends
6. esthetics
7. institutions, industries, attractions
8. service centers
9. transportation and access
To these must be added program factors, such as the following:

1. markets, promotion
2. information, direction
3. socio-environmental
4. implementing agents

Another element of this concept is recognition of the difference between touring and destination tourism. Touring tourism development need not withstand repetitive use by the same users, time after time. Visiting historic sites, natural resource attractions and enjoying roadside scenery are examples of touring tourism. For destination tourism, however, development requires a set of activities at attractions that are repetitive and more limited to a localized vicinity. For example, conventioneering, resorting, vacation home use and organization camping require slightly different attraction development and foundation factors. Figure 1 illustrates the concept of identifying zones suited to touring and destination tourism development. The white areas of this diagram are those portions of the region containing highest potential, especially for attraction development. These areas, in turn, are in a logically accessible relationship to a community that has best potential for clustering most service businesses related to travel. These service centers are also well related to major transportation corridors.

APPLICATION

A region of 20 counties in south-central Texas was arbitrarily selected for application of this concept. The boundaries, primary cities, counties and main highways are illustrated in Figure 2.
The first step consisted of research of the region's physical factors. By means of study of documents, reconnaissance of the region and interviews with experts, both narrative statements and maps were produced. Special mapping procedures were used to lay the foundations for the zones with greatest potential.

Tables 1 and 2 indicate a separate weight, or "index", given to each physical factor, based on the assumption that these factors are not of equal weight in support of either touring or destination tourism development. These weights were developed by a panel of experts. Obviously, this is a subjective evaluation but is based not upon whim or local pride but upon documentation of facts about each factor. For mapping purposes, each index was divided into five levels of potential support, from "strong" to "weak." The resulting number values could then be used in preparation of a hand-drawn map for each factor. Figure 3 illustrates a hand-drawn map for the factor of "water-waterlife" for touring tourism.

The several hand-drawn maps were then translated into computer maps so that they could be aggregated. Wherever the totals were the largest, the strength of support of tourism development would be strongest. By using a computer map grid for the SYMAP (Dudnik: 1971) program, each cell for the scale of map used represented 6.25 square miles. Figure 4 is a computer printout of the same map as Figure 3.

As the computer maps were aggregated, it was not necessary to produce printouts at the various stages. However, this is possible and examples are shown in Figures 5 and 6. These represent aggregations of three physical factors and all natural resource factors, respectively. The main advantage of the computer is that these values can be stored in order to produce totals.
To graphically illustrate these totals, the maximum score is divided into ten levels, printed out as symbols; the dark to light illustrating high to low scores. For ease in identifying the potential, these ten symbols were graphically regrouped into five, showing areas where the combined factors were "strong" to "weak," as illustrated in Figures 7 and 8.

Study of both the research information about all factors and the results of the computer mapping provided locational conclusions about what kinds of development had potential and where such development most logically could take place. This final assessment is illustrated in Figures 9 and 10. Graphically, four main elements are illustrated: zones with highest potential; locations with high potential for future attraction complexes; key community service centers and transportation and access.

Touring Tourism

In Figure 9 are indicated the potential touring tourism developments that could take place because of the assessment resulting from this concept. The main foundations were historic sites and artifacts and natural resource assets. In many instances, no development had yet been made at historic points of interest with the potential of large and very meaningful complexes. Developing museums, restoring buildings, adding pageantry nearby, and identifying historic sites and buildings, could offer opportunities for loop walking or drive trails and holding special events in squares, malls or parks. Interesting land features, such as reservoirs, rivers, isolated forests, beaches and coastal resources provide many opportunities for touring tourism activity development.
Wherever there appeared to be a grouping of these attraction complex potentials around a service center and near a circulation corridor, a zone was identified. This is merely a generalized area in which a number of complexes could be developed and served by the same service center and access.

Because of the importance of the travel ways for touring, all transportation corridors, when finally selected, would need to be studied and possibly redesigned to fulfill tourism functions. This might require very little redevelopment—perhaps only some signage and improved information-direction material. On the other hand, major cleanup, scenic easements, new highway design, expanded service center functions (toilet facilities at rest stops), new landscape plantings and the installation of certain constraints against public trespass along the way may need to be initiated. For air travelers, new linkages with ground tour corridors may need to be created.

Although this provides ideas and impetus for new tourism development, further refinement would be necessary. For example, the developers of the several tours could conceive of another stratification—that by topical interest of the tourist. The basic routings could remain the same but a "heritage" tour might make stops at different attractions complexes than an "industrial plant" tour or a "scenic" tour.

Service centers were chosen on the basis of their own existing service capability, their potential for expanded service, their proximity to potential attraction complexes and the accessibility.
Destination Tourism

For destination tourism, shown in Figure 10, this region has good highway access and some air access to existing and potential markets. The following five destination zones contain cohesive resource foundations lending themselves to considerable future tourism development.

Zone A contains potential for vacation home complexes, resorts, dude ranches, organization camps, water sports areas, conference centers and major sports arenas. The hills, lakes, topography, history and state capital combine to provide strong foundations. By increasing the things to see and do, linkages with expanded markets could be made. Research of socio-environmental factors showed that a few counties in this zone were concerned about social impacts of tourist growth.

Zone B, a coastal area, has great potential because the resource assets have not yet been developed to a very large extent. Increased development to utilize the birdlife, waterlife, waterfront forces, biological production in the estuaries and geological formation of barrier islands has many possibilities. Large nature interpretive complexes could provide an important tourist function, leaving extensive areas in protected zones for preservation of natural ecosystems. Other potential lies in the festivals, pageants, historic restoration and interpretation of the coast.

Linkages with outside markets are not strong. Special design care must be exercised to prevent erosion of the esthetic resource assets as better access is provided. Service centers are not yet fully developed for tourism but have this potential.
Zone C is well suited to inland Texas tourism development, such as for dude ranches, resorts and special development around the German and Czech themes. Market sources are generally available, accessible over good highways and the service centers are beginning to orient themselves toward tourist development.

Zone D is a coastal plains destination area with the city of Victoria and the Guadalupe and Lavaca Rivers are prime assets. Opportunities for camping, vacation home, water recreation and conference activities can be found here. The countryside is picturesque and the outside markets would find it a zone much more interesting and appealing than the typical Texas image.

Zone E, although relatively small, does have potential centered on the natural resource assets of river valleys. Camping and vacation home complexes could offer interesting vacations for many and are readily accessible from markets.

Program Concepts

Although not lending themselves as well to mapping, the research of program factors led to conclusions important to development potential. Study limitations did not allow adequate depth of local citizen input. Certainly, any regional assessment must have great input from local citizens, governments, developers and potential investors.

One conclusion centered on the need for greater education on the several facts of tourism development. Some of the prime businesses oriented to tourism were aware of its impact but tourism does not now enjoy a high level of understanding within the region. For example, it is not well known that in these counties there is now an economic impact annually of $307,692,700, employment of 2,000 people and returns to local taxes of $3,116,800. (The Impact: 1978)
Both nearby and distant markets might be cultivated but only following coordinated development-promotion-information programs. This is not now available for these zones. Special market interests could be emphasized: spring and fall offer idyllic vacation settings. Careful market studies of the special opportunities within this region could be of value.

Improved information and communication offer other opportunities. Even existing attractions and services are not well communicated to the visiting public. It is not easy for the visitor to learn about points of interest, travel ways, accommodations and specialty shops.

If the concepts of physical development are to be realized, it is clear that stronger organization to stimulate development is needed. In several instances, industrial development is promoted but no comparable programs for tourist development can be found.

Linkage needs to be established between the many forces fostering resource protection and restoration and the developers of tourism. While there is a functional spinoff from such programs as historic restoration, there is no organized linkage with the programs of inviting and providing services to visitors.

The physical development of tourism could be enhanced if greater coordination of decision-making could be accomplished between the several state agencies that impact on tourism. Without creating new and cumbersome bureaucratic procedures, there is merit in each agency input to the other on tourism matters.

Another important level of communication and decision-making is that between counties. Perhaps through leadership and catalytic action of the councils of government, the several counties of the region can bring the several opportunities into alignment and implementation.
Finally, linkage between public policy on park and recreation programs and decisions on commercial development of tourism is a great opportunity for improved tourism. One major new policy of all public agencies could be to stimulate innovative and environmentally sensitive development by the private sector. Closer collaboration and cooperation between the public and the private sectors shows promise of improved location selection, improved service to visitors and improved protection of the many resource assets of the region.

CONCLUSIONS

This concept, as an approach to landscape assessment for tourism development, can provide insight into locations best adapted to this use. With the knowledge of prime landscapes suited to tourism, decision-makers can work with all public and private forces to implement action. This action, however, may lead to protection of landscapes as well as their development, especially on sites especially fragile or of rare quality. It also allows evaluation of potential impacts, such as social, economic and environmental stresses that may be set up as tourism uses are made of the landscape. It provides planners with basic information for judging competitive landscape uses, such as for industry, extraction or agriculture. It allows ample freedom for application of traditional principles of landscape architecture. Its utility is limited only by the extent of facts and techniques now available and the extent to which it is implemented.
BIBLIOGRAPHY


Gunn, Clare A. *Vacationscape: Designing Tourist Regions*. Bureau of Business Research, University of Texas, Austin. (1972)


NOTE:

The concept described here and the illustrations are from the book, *TOURISM PLANNING* by Clare A. Gunn, published by Crane, Russak, Inc., New York, N.Y.
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### TABLE 2  WEIGHTED INDEX SCALES FOR DESTINATION TOURISM

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Figure 1. TOURING AND DESTINATION TOURISM

Diagrams showing touring and destination type zones for tourism development and their combination for overall tourists.
Figure 2. THE STUDY REGION

The 20-county region of Texas used in this experiment in the assessment of tourism development potential.
Figure 3. "WATER AND WATERLIFE" ZONES AND INDEX BY HAND

Map of the location of one physical factor and identification of scale, taken from Table 1.

Figure 4. "WATER AND WATERLIFE" ZONES AND INDEX BY COMPUTER

A map translating Figure 3 into SYMAP computer printout.
Figure 5. "TOURING" RESOURCES—THREE FACTORS

A SYMAP computer printout showing aggregation of three physical resource factors and the resulting range in intensity of support for tourism development.

Figure 6. "TOURING" RESOURCES—ALL NATURAL RESOURCE FACTORS

A SYMAP computer printout showing aggregation of all natural resource factors. Both upper and lower portions of the region begin to take on importance.
Figure 7. "TOURING" TOURISM—ALL PHYSICAL FACTORS

Computer printout showing areas with strongest to weakest resource strength in support of touring tourism development.

Figure 8. "DESTINATION" TOURISM—ALL PHYSICAL FACTORS

Computer printout showing areas of strong to weak support of destination tourism development.
Figure 9. "TOURING" TOURISM--CONCEPTS
Potential zones for development, containing locations of possible attraction complexes, service centers and proposed touring routes. Arrows indicate prime entrance points.

Figure 10. "DESTINATION" TOURISM--CONCEPTS
Potential zones for development, containing locations of possible attraction complexes and service centers. Arrows indicate prime linkage with market areas.