TOURISM PLANNING TECHNIQUES

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Contrary to the popular belief that all tourist destinations already have been found, there actually is potential for many more. Furthermore, those in existence continue to grow or wane in popularity. Tourism destinations are dynamic, not static. However, the assessment of potential for destinations has no acceptable methodology; only experimental concepts.

As nations and regions increasingly seek economic gains as well as protection from problems and issues, the need for better assessment techniques arises. No longer is the common practice of muddling through acceptable—for better user satisfactions, for better economic impact, or for environmental protection. Even traditional planning approaches now seem inadequate.


This paper contains description of one model that has grown out of our experimental work. Illustrated are two applications:
Central Texas region and Oklahoma state. This method is offered as a reasonably fast and low-cost approach that should appeal to many sectors of tourism who now seek a way of identifying potential. It does require input from a team of professionals in addition to local representation.

**FACTORS FOR ASSESSMENT**

The identification of destinations with potential requires an understanding of many factors that contribute to the success of tourism. Generally, these factors can be grouped into (1) market factors and (2) physical (geographical) factors.

**Market Factors**

The selection of destinations for tourism depends greatly upon how well the demand can be anticipated. At any one time, an evaluation of domestic and international market potential can be made. When traveler preferences are divided into market segments, the extent to which these can be satisfied with development can be determined. For example, Taylor (1980,56) found that of six segments of Swedish travelers, the Canadian tourism plant (existing destinations) could satisfy only one segment whereas all USA segments could be satisfied. In order to evaluate the physical factors for destinations, it is important to identify pertinent characteristics of the market.

**Physical Factors**

Little understood is the non-uniform distribution of physical resources within a region or nation. Some areas lend themselves much more to tourism development than do others.
Development—the addition of planning, investment, construction, and management to resources—is most productive when the resources are most supportive. Those areas where positive resource factors are most abundant and of highest quality are most productive for tourism development.

Within a region or nation, the broad array of physical resources can be operationally reduced to the nine categories, listed in Table 1. These factors lend themselves well to mapping so that their distribution and strength of support can be delineated for visual inspection and evaluation.

A COMPUTER-ASSISTED MODEL

Described here is a model of six steps in a process of assessing a region or nation for tourism and identifying potential destination zones. Briefly, the steps are:

1. Research of markets—determine travel interests of key market segments.

2. Research of physical factors—study of all factors in Table 1, their location, abundance and qualities.

3. Hand mapping—preparing (to uniform scale) hand maps of all physical factors and their distribution.

4. Computer mapping—weighting the factors and converting hand maps to computer maps.

5. Aggregating computer maps—overlaying the several factor maps to determine areas of greatest strength.

6. Interpretation for zones—determining zones with greatest potential for tourism development.

The following description may help the reader understand the reasoning behind each of these steps.

Step 1. Research of Markets. For destination planning, only key characteristics of markets are needed. Especially important
is the hierarchy of dependency of tourist activity on the land resources. In other words, when tourism preferences are known, the search can be made for locations that have physical resources suited to these activities (Table 1).

Step 2. Research of Physical Factors. Most nations and regions have on file the secondary data needed for this step--geographic descriptions, maps of physical resources, statistics on resources and their distribution. The factors listed in Table 1 have been found to be most critical and adaptable to this model. This step is directed less toward statistical analysis and more toward the location, extent, and general qualities of each factor. Needed are summary statements of the assets and liabilities as well as maps of zones where the resource is important.

Step 3. Hand Mapping. Each factor requires mapping to uniform scale so all can be overlayed. Each map allows the researcher-cartographer to delineate four generalized zones--locations where the resource is "very important," "important," "somewhat important," and "of little or no importance" for tourism development. The ratings of importance should be a reflection of this region's quality as compared to another equally accessible to the same markets.

Step 4. Computer Mapping. In the past, landscape architects and planners used several map tracings as overlays to aggregate information. This process was slow, cumbersome, costly, and limited to only a few overlays. Now, through the conversion of map data to computer technology, many more overlays can be aggregated and with much greater speed and accuracy.
At this step, the several factor maps can be given different weights, indicating the relative importance of each factor.

Step 5. Aggregating computer maps. The purpose of aggregating the several physical factor maps is to determine those locations where the total strength of the resource base is the greatest. For example, for future tourism development, it is insufficient to merely promote. Until attractions are developed, and in areas best suited to them, promotion is premature. And, it is important to have as many supporting factors as possible.

Step 6. Interpretation for zones. This process intentionally omits important influences that can be applied after the zones of potential have been identified. Then, factors such as jurisdictional boundaries, land regulations, land price, and political policy can be applied. From the computer maps and the research study of markets and physical factors, concepts and recommendations for development can be provided.

AN APPROACH--CENTRAL TEXAS

As an experiment, this process was applied in 1982 to a 19-county portion of Texas (16,079 square miles, 41,805 kilometers), an area about the size of the Netherlands (Gunn:1988). In that year, tourism already provided expenditures of $335 million, generating a payroll of $64 million, 7,853 jobs, and tax revenues of $12 million. The area had a population of 780,554 and included the major cities of Waco, Temple, Killeen, Bryan, and College Station.

Step 1. Research of markets. General assessment of markets for the area revealed three prime market sources. (1) Within
the region there are four major market areas—Waco, Killeen-
Temple, Bastrop, and Bryan-College Station—with a total
population of 580,240. An additional 200,308 people live in
small towns and rural areas within the region. (2) Within a
radius of 100 miles there are three population concentrations
with a total population of over 7 million (Dallas-Fort Worth,
Houston-Galveston, San Antonio-Austin). Other markets within
this radius are 409,000 people. (3) Beyond a radius of 100 miles
lie many additional markets—in Texas, surrounding states, and
prime market areas in California, New York, Illinois, and some
foreign countries.

Both business and pleasure travel purposes to the region are
important. Although no new survey research of markets was
performed, it appeared that the dominant travel segments were:
sports fans (to universities, colleges, high schools), outdoor
recreationists, visitors to friends and relatives, travelers to
festivals and events, tourists on tour to historic areas, and
business and convention visitors.

Step 2. Research of physical factors. A total of nine
physical factors were studied.

**Water** resources were found to be plentiful—six floatable
rivers of good quality, 15 lakes (66,000 acres) with beaches,
fishing, and boating potential. The **vegetation** varies from
woodlands to prairies. The overstory of hardwoods (oak,
mesquite) and an understory of grasses and wildflowers occur in
bands separated by "blackland" prairies, well suited to livestock
and agriculture. These offer not only an esthetically pleasing
landscape but good habitat for wildlife—deer, quail, rabbits, squirrels, migratory waterfowl, and an abundance of birds. The climate and weather of the region is humid subtropical with cool winters and hot summers. Prevailing winds are southerly, mean annual precipitation ranges from 19 to 40 inches, and the region received 62 percent of the total available sunshine annually. Severe storms are infrequent. Topography of the area ranges from hilly and rolling to level with major land relief along the Balcones escarpment in the northwest portion. Several river corridors provide an interesting variety of land relief.

The rich historical background begins with Cherokee occupations and continues through periods of Spanish control, settlement, the Texas Revolution, formation of the Republic of Texas, and statehood. "Washington-on-the-Brazos" and Independence were important sites in the formation of the Republic of Texas. Many elaborate Victorian homes and historic buildings can be found throughout the area. The region has an abundance of legends and myths and is enriched by a varied ethnic heritage. Whereas the esthetics of the region may not be as spectacular as exotic beach and mountain destinations, the landscape is competitive with other regions equally available to the dominant markets. The waters, trees, wildflowers, land relief, and wildlife offer all-year interest for visitors. Some cities have developed attractive settings; others are cluttered and unattractive. Existing attractions are already diverse and reasonably abundant. Many parks, campgrounds, beaches, historic sites, educational institutions, manufacturing plants, and festivals already are available.
The four major urban complexes have sound infrastructure—water supply, waste removal, fire control, police. In addition, they have historic sites, entertainment, and educational institutions, as well as lodging and food services of importance to travelers. The highway transportation network is especially good. Interstate 35, located to the west of the region, supports an average of 32,000 vehicles per day where it penetrates the region; I-45 skirts the east side of the area. Interstate, U.S., and state highways provide good linkage between the region and Texas markets. Commuter airlines connect the major cities with the Houston Intercontinental Airport and the Dallas-Fort Worth Airport.

Step 3. Hand Mapping. For each of the factors listed above, a map was prepared by hand, showing zones within the region where the factor is found. These zones were labeled by priority depending upon the quantity and quality of the resource.

Step 4. Computer Mapping. This step involves translating the zones of the hand maps to computer language and cartography. But first, because each factor has differing relative importance for tourism development, the factors were weighted. The weightings were judgemental and divided for "touring circuit" and "longer-stay" potential destination development. Weightings are shown in Table 2.
TABLE 2
WEIGHTED TOURISM DEVELOPMENT FACTORS

Weighted index is based upon comparative importance of the several factors for the development of two types of tourism—touring circuits and longer-stay.

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>WEIGHTED INDEX FOR TOURING CIRCUITS</th>
<th>WEIGHTED INDEX FOR LONGER-STAY</th>
</tr>
</thead>
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<tr>
<td>Water, waterlife</td>
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<td>21</td>
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<tr>
<td>Vegetative cover, wildlife</td>
<td>6</td>
<td>11</td>
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<td>Climate, atmosphere</td>
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<td>8</td>
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<td>Topography, soils, geology</td>
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<td>History, ethnicity, legends</td>
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<td>8</td>
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<td>12</td>
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<tr>
<td>Transportation</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>

Step 5. Aggregating Computer Maps. By means of the computer, all maps for the touring circuit analysis were aggregated. Likewise were those for longer-stay development. The results are shown in Figures 1 and 2. These maps are darkest where the factors combine the strongest.

Step 6. Interpretation for Zones. By means of review of the research of the region’s characteristics and the market segments, the aggregate maps were interpreted.

Fig. 3 shows interpretive concepts for eight touring circuits. The stars indicate locations where there is potential to develop new or improve existing attractions. When these are completed, there is potential for these touring circuits to be identified and promoted.

Fig. 4 shows four longer-stay zones derived from the analysis. For example, Zone B has resource potential for longer-stay visits in two subzones—one centered on Kileen-Temple and one on Georgetown-Round Rock. Two major reservoirs, Lake Belton
FIG. 1 AGGREGATE MAP FOR TOURING CIRCUITS

FIG. 2. AGGREGATE MAP FOR LONGER STAY
FIG. 3. CONCEPTS FOR TOURING CIRCUIT DEVELOPMENT

and Stillhouse Hollow Lake, dominate the natural resource recreation and resort opportunities. The Scottish ethnic resource, historic homes, the historic village of Salado, Old Summers Mill, and the well-developed service centers are major assets for expanded vacation and business tourism. The University of Georgetown, Lake Georgetown, Inner Space caverns, the slave cemetery and grave of outlaw Sam Bass, restored homes and shops provide the foundation for longer-stay development. The zone is easily accessible for millions of market potential from Austin and the Fort Worth-Dallas area.

This analysis also resulted in several overall conclusions regarding potential.

For touring circuits, historic homes and sites need restoration, interpretation, and ancillary services; industrial, agricultural, and ranch areas have potential for interpretive
FIG. 4. CONCEPTS FOR LONGER-STAY DEVELOPMENT

tours; tours to parks and rural areas for scenic appreciation and photography could provide visitor satisfactions if developed.

For longer stay, the several zones need greatly improved meeting and service facilities for the medium to small-size conferences; a great deal of improvement is needed in entertainment if longer-stay visitors are to be attracted; the abundance of water-based recreation has hardly been touched with major resorts; and much organizational clustering of attractions is needed.

Information should be organized for greater understanding and interpretation; guide books are needed; better information distribution and centers are needed.

When more attractions are truly available, much greater promotional effort should be initiated for advertising,
publicity, public relations, and incentives; promotion should be segmented for the several target markets.

Regarding social and environmental issues, no major constituencies were found but all tourism expansion plans should have heavy public involvement and support.

The major obstacle for greater tourism appears to be apathy. No organizations, public or private, have identified tourism as a major growth opportunity, not only for economic reasons but for the social value of cultural exchange and well-being of the communities and surrounding areas.

AN APPLICATION—OKLAHOMA

This method was applied also to the state of Oklahoma (PW:1987) to discover potential destination zones and opportunities for their development.

The result was identification of two primary, four secondary, and six tertiary zones as illustrated in Figure 5. The following recommendations for product development for each zone were made.

A. PRIMARY ZONES:

A-1 Oklahoma City Zone

* Major improvements in conference, conven, facilities
* Better massing of existing attractions, tours
* Greater exploitation of "pass-through" tourists
* Major cowboy entertainment complexes
* Agricultural/range history museum and center

A-2 Tulsa Zone

* Major national-class "folklore institute" (Indian and other ethnic center, entertainment, events
* Enhanced development of historic sites (Indian, Civil War)
* Improved existing attractions, tour packaging
* Expanded meeting, conference programs
FIG. 5. RECOMMENDED DESTINATION ZONES FOR OKLAHOMA

* Greater exploitation of "pass-through" travelers
* New Will Rogers entertainment center
* Redevelopment of Osage, Chickasaw capitals
* Prehistoric visitor center and interpretation
* Osage ethnic museum and visitor center

B. SECONDARY ZONES

B-1 Miami Zone

* New national-class prehistoric museum
* Major petroleum interpretation center
* Expanded lake resort development
* Greater exploitation of "pass-through" travelers

B-2 Muskogee Zone

* Major redevelopment of several Civil War forts with interpretation, pageants
* Major prehistoric museum and institute (Spiro)
* Expanded Cherokee theme—historic sites, events
* Tourist tour redevelopment of first OK railroad

B-3 Ardmore Zone

* Expanded private resort development
* Redevelopment of historic forts
* Redevelopment of Chicaksaw capital
* Redevelopment of trail towns near I-35
* Expanded Arbuckle Mountain resorts, scenery

B-4 Lawton Zone

* New military visitor center, museum (Ft. Sill)
* Prehistoric museum and interpretation
* Redevelopment of Chisholm Trail (Duncan-Enid)
* Expanded Indian culture centers, tours
* Expanded private sector outdoor recreation

C. TERTIARY ZONES

C-1 Ouachita Mountain Zone

* Redevelopment of scenic routes
* Expanded outdoor recreation development
* Restored forts and historic trails
* New major fishing events, festivals

C-2 Enid Zone

* Chisholm Trail redevelopment (Enid-Duncan)
* Outdoor drama: "The Run"
* New guest ranch development

C-3 Altus Zone

* Expanded Quartz Mountain development
* Prehistoric Plains Indian museum, interpretation
* Redevelopment of "Dean's Crossing," Red River trip
* New cowboy-cattle trail recreation

C-4 Weatherford Zone

* Greater exploitation of "pass-through" travelers
* Development of tour packages
* Cowboy entertainment, guest ranches

C-5 Woodward Zone

* Expanded cowboy-ranch development
* Restoration of historic casino, entertainment
* Outdoor recreation trails
* New hunting ranches

C-6 Black Mesa Zone

* Prehistoric museum, interpretation
* Greater exploitation of "pass-through" travelers
* Western wildlife museum and interpretive center

CONCLUSIONS

Physical planning for tourism development is directed primarily to the discovery of desirable locations for destination zones. Because some areas have a greater number and
better quality of desirable factors, it is necessary to research a region.

The fact that tourism development is driven by two forces—markets and supply—it is important to understand the characteristics of markets. Different market segments have different interests, requiring different development, which in turn requires different settings.

When several resource factors are studied, mapped, and summarized, it is possible to discover areas where the resource factors are the strongest. By using computer cartography, the several maps can be aggregated rapidly and accurately. Planners can then develop concepts and recommendations for future development, reflecting the best market-product match.

REFERENCES


