Preliminary Feasibility Analysis of an Aquarium/Park Complex Proposed for Acapulco, Mexico

6-30-1975

Harrison Price Company

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PRELIMINARY FEASIBILITY ANALYSIS
OF AN AQUARIUM/PARK COMPLEX
PROPOSED FOR ACAPULCO, MEXICO

Prepared for
Fideicomiso Acapulco
July 1979
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Section 1

INTRODUCTION

Fideicomiso Acapulco, a public agency of the Mexican state of Guerrero, is in the process of implementing a master plan for a major recreation attraction complex on a 20-hectare tract of land in the heart of Acapulco. The envisioned focal point of the complex would be a themed aquarium complex featuring sea life indigenous to tropical waters, along with a variety of supplementary public park and commercial entertainment activities, including a large picnic area, shopping and dining facilities, and amphitheaters for marine and musical shows. The client group originally retained Harrison Price Company to develop the specific content of the attraction, with the objective of optimizing market performance, to prepare economically viable sizing guidelines, and to analyze the feasibility of the project as so conceived (see proposal included as Appendix A). Subsequent to the start of the consulting program, however, it became apparent that severe constraints existed on the amount of time available for planning and construction of the attraction, and, moreover, that much of the scope and content of the attraction had already been finalized by the Fideicomiso staff. As a result, HPC's consulting effort was redirected to analyzing the feasibility of the project as conceived by the client group, while allowing for refinements introduced by management personnel of Sea World, Inc., of San Diego, who were independently retained as technical consultants. This interim report presents the findings of HPC's analysis to date, which is necessarily preliminary in that the specific content and precise physical layout of the attraction are still evolving.

Following this introduction, Section 2 summarizes the major findings and conclusions of the study. The proposed site and available market support are evaluated in Section 3, while Section 4 examines the content of the attraction as presently envisioned and establishes a preliminary development budget. Attendance estimates and facility sizing recommendations are developed in Section 5, along with illustrative organization and staffing guidelines. The report concludes with an assessment of potential financial performance in Section 6, taking into account the currently indefinite status of several major issues affecting the project.
This study was conducted by Harrison A. Price and Sharon J. Dalrymple. HPC acknowledges with appreciation the assistance of the staff of Fideico-miso Acapulco, the Acapulco Tourist and Convention Bureau, and especially the staff of Sea World, who provided invaluable technical expertise in the aquarium aspects of the development program.
Section 2

SUMMARY AND CONCLUSIONS

This section highlights the principal findings and conclusions of the research program. No attempt is made here to provide supporting data or to detail research methodology; the reader is referred to the body of this report for a discussion of the full scope and depth of this consulting effort.

SITE AND MARKET ENVIRONMENT

As a prerequisite to assessing the market outlook for the proposed attraction, analysis was made of the locational characteristics of the subject site and the magnitude of available market support.

Locational Setting

The site selected for the proposed development is located almost dead-center in the crescent formed by Acapulco Bay. It contains some 20 hectares, with 650 meters of frontage on the Costera Miguel Aleman, Acapulco's principal thoroughfare. Most of the site is level, except for a 35-meter hillock rising abruptly in the northeast corner of the property, and has an extensive amount of vegetation, including several large specimen trees. Across the Costera from the property is an excellent public beach. Rapid and easy access is afforded by the Costera, along which most of Acapulco's hotel inventory is concentrated, thus creating a high-exposure setting for the attraction. Other than hotels, surrounding land uses are mainly comprised of other tourist-serving businesses and present no problems as to compatibility.

The success of Acapulco as a resort destination is largely associated with its amenable climate, particularly during winter months. Average annual temperature is a comfortable 27.5° Centigrade, and little month-to-month variation is this norm is experienced. A wide variation is characteristic of rainfall, however, with virtually the entire annual total of 1,413 millimeters recorded in the period June-October. This large amount of summer rainfall has certain design implications, in that rain protection in the form of roofs, building overhangs, and awnings will be required to maximize the length of the operation schedule and thereby improve market performance.
Available Market Support

To determine the magnitude of market support available to the proposed attraction, the size and characteristics of the resident and visitor populations were analyzed. The resident market was divided into two segments on the basis of distance from the site, while the tourist market was divided into domestic and foreign components. The size of these available markets is summarized below:

<table>
<thead>
<tr>
<th>Total Market Size</th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>590</td>
<td>750</td>
<td>880</td>
</tr>
<tr>
<td>Secondary</td>
<td>145</td>
<td>190</td>
<td>220</td>
</tr>
<tr>
<td>Tourists:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>1,300</td>
<td>1,500</td>
<td>1,600</td>
</tr>
<tr>
<td>Foreign</td>
<td>1,300</td>
<td>1,500</td>
<td>1,600</td>
</tr>
<tr>
<td>Total</td>
<td>3,335</td>
<td>3,940</td>
<td>4,300</td>
</tr>
</tbody>
</table>

As shown, a combined resident and tourist market of approximately 3.3 million people will be available to the proposed attraction in the first full year of operation, rising to some 4.3 million at the end of the 10-year period. This is an adequate base and one which is qualitatively well suited for a facility of the nature proposed. The resident population is youthful and family-oriented, and is heavily concentrated in the neighborhoods immediately adjacent to the subject site, while the tourist population is large, quite affluent, and characterized by a comparatively long stay in the Acapulco area.

CONCEPT EVALUATION AND DEVELOPMENT BUDGET

As originally proposed, one of the major objectives of this research program was to develop a conceptual framework for the proposed Acapulco aquarium that would maximize market and financial performance. As stated in the introduction to this report, however, it became apparent after study inception that severe time constraints existed on project implementation (the attraction must be in operation no later than January 1981), with the result that much of the basic design and planning work was completed by the client group

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on a highly accelerated schedule. HPC thus reviewed the client plan, in-
cluding modifications introduced by personnel of Sea World, Inc., and jointly
with Sea World, developed a preliminary estimate of capital costs. The de-
velopment program as described herein is subject to change, with the follow-
ing summary indicating only what is presently known.

The Marine Life Attraction

The statement of concept for the proposed attraction was preceded by a brief
review of marine life parks in general, and operating characteristics of
selected attractions were examined. It was noted that the modern marine
park has a much greater impact on available markets than the traditional
municipally-sponsored aquarium and requires much greater capital outlays in
both construction and operation in order to create the basic environment
that draws and retains visitors. Chief among the marine park's assets are
a reliance on live shows featuring performing dolphins and seals, pools
where visitors can actually touch and feed marine animals, spectacular aquar-
ium displays, attractive landscaping, and a sizable complement of restaur-
ants, snack stands, shops, and other visitor service facilities. This broader
entertainment scope increases visitor length of stay, and hence, per capita
spending, well beyond what is commonly experienced in the conventional aquar-
ium.

Envisioned Concept and Scope of the Acapulco Attraction

The subject site has been made available for development by the Guerrero
state government, which will also contribute all or most of the capital in-
vestment required to implement the proposed project. Motivated by the de-
 sire to create a high-quality recreation opportunity for local residents and
increase residual benefits from tourism, the state's desire is to provide
a "showcase" attraction serving both markets. The disparity in income be-
tween the resident and tourist populations, however, necessitates an unusual
approach to development. Essentially, the attraction has been divided into
two sections of more or less equal magnitude: a public park section and en-
tertainment area requiring only a token admission fee, and a private section
containing the aquarium and a variety of specialty shopping/dining/entertain-
ment nodes requiring a "normal" admission charge. The two sections of the
park would be closely integrated by means of the landscaping scheme and overall thematic treatment, but would function separately from an operational standpoint. By definition, the public park would draw primarily on the resident market and the aquarium section on the tourist market.

The general theme selected for the proposed attraction is the cultural heritage of the Pacific Ocean Rim, focusing on those nations and peoples which have had the closest traditional ties with Mexico. Major elements of the public park will include a large picnic area, a nature walk, a children's playground and petting zoo, a restaurant and several snack stands, a 1,000-seat amphitheater, and a 900-square-meter cultural plaza. The amphitheater would require a ticket purchase in addition to the general admission fee and will remain open at night (all other portions of the public park will close at dusk). The aquarium side of the park will be comprised of two outdoor marine stadiums of about 500 seats each for dolphin and seal shows, an aquatic reptile exhibit, tide pools, dolphin and seal/otter feeding pools, and two large aquarium tanks, along with numerous small display tanks. Major non-marine attractions will include a themed children's play area, a 90-meter observation tower with restaurant and bar, a Japanese Village with a restaurant and shops, a dining/entertainment center located on the hillock in the northeast corner of the site, and an aerial tramway ride. An ancillary attraction will be a restaurant located on the beach, which will be accessible from both sections of the park. The restaurants will remain open during the evening, while the marine facilities will operate only during daylight hours.

The estimated cost of developing the facilities just described, along with required support facilities and general site development expenses, totals $23 million, or 413 million in local currency after deducting 20 percent to allow for potential labor and materials cost savings in Mexico. The major portion of this budget will be incurred in development of the aquarium complex, projected at $12.9 million (MN 233 million), equivalent to 57 percent of the total budget. The public park section will entail an expense of roughly $2.6 million (MN 47.3 million), or 11 percent of the total. Other estimates include $450,000 (MN 8.1 million) for the entrance complex, $500,000 (MN 9 million) for the beach restaurant, $1.4 million (MN 24.3 million) for
support facilities, and $5.1 million (MN 90.9 million) for general site development. A 5-percent contingency has been added to these figures, along with another 5-percent allowance to cover pre-opening expenses.

HPC understands that the Guerrero state government has made a maximum of $16 million (MN 360 million) available for development of the proposed attraction. It can be seen that estimated costs exceed this limit by about $9 million (MN 94 million); however, several opportunities exist for private funding of selected components. Interest has already been expressed by the Banco Comercio for sponsorship of the observation tower, and other possibilities seem attainable given the wide exposure and recognition the park is likely to achieve. If costs must be contained within the government budget, the content of the proposed attraction must be reduced, which will in turn reduce the market impact of the project and lower revenue-generation potential. The attraction may thus fall short of the "critical mass" necessary for optimum financial performance; HPC therefore strongly recommends that private sponsors be aggressively pursued.

ATTENDANCE ANALYSIS AND PHYSICAL PLANNING GUIDELINES

As a basis for market penetration and attendance estimates for the Acapulco attraction, the experience of comparable facilities and inventory of competing attractions in Acapulco were reviewed. Physical planning guidelines then were derived, followed by a preliminary estimate of operating labor required.

Estimated Market Penetration and Attendance

Analysis of the market performance characteristics of existing major attractions in the US offered a general perspective for the subject development. Based on that review, along with the limited inventory of high-quality recreation opportunities in Acapulco, the unique experience that the proposed attraction will represent, and the year-round day and night operating schedule, HPC projects substantial market impact for the proposed project. The following text table summarizes attendance projections for the public section of the facility:
Slightly more than 2.3 million people are expected to visit this section of the complex in 1981, with the volume growing to some 3.6 million by 1990. Reflecting the high resident orientation of this section of the park, between 77 and 80 percent of total visitation over the indicated period is expected to be locally generated.

An entirely different pattern of attendance is forecast for the park's aquarium section, as shown below:

<table>
<thead>
<tr>
<th>Total Attendance</th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents</td>
<td>1,799</td>
<td>2,409</td>
<td>2,915</td>
</tr>
<tr>
<td>Tourists</td>
<td>520</td>
<td>645</td>
<td>720</td>
</tr>
<tr>
<td>Total</td>
<td>2,319</td>
<td>3,054</td>
<td>3,635</td>
</tr>
</tbody>
</table>

The total aquarium visitation level will amount to 840,000 in 1981 and approximately 1.4 million in 1990. Tourists will comprise 80 to 85 percent of all aquarium attendees, for an attendance profile almost exactly the reverse of the public section of the attraction.

It is important to recognize that there is some overlap and double-counting between the estimates for the two areas of the park because a certain number of visitors can be expected to visit both facilities; the figures are thus not entirely additive. It must also be cautioned that the record of comparable experience on which these projections were based is somewhat inconclusive and, moreover, the removal or contraction in scope of any of the proposed project's major components would affect potential attendance volume. The figures must therefore be viewed as elastic, although care has been taken to minimize the margin of error.
Physical Facilities Requirements

An analysis of likely patterns of attendance by month, day of week, and hour was made to derive physical planning factors. The following physical sizing guidelines were subsequently determined for the public section:

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Day Attendance</td>
<td>13,600</td>
<td>17,900</td>
<td>21,300</td>
</tr>
<tr>
<td>Peak Hour Attendance</td>
<td>8,200</td>
<td>10,800</td>
<td>12,800</td>
</tr>
</tbody>
</table>

Food Service Facilities

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant Seats</td>
<td>110</td>
<td>150</td>
<td>170</td>
</tr>
<tr>
<td>Snack Stand Windows</td>
<td>10</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Merchandise Sales Space (m²)</td>
<td>290</td>
<td>680</td>
<td>1,150</td>
</tr>
<tr>
<td>Parking Spaces Required</td>
<td>740</td>
<td>970</td>
<td>1,150</td>
</tr>
</tbody>
</table>

Estimates for the aquarium section are as follows:

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Day Attendance</td>
<td>4,900</td>
<td>6,900</td>
<td>8,200</td>
</tr>
<tr>
<td>Peak Hour Attendance</td>
<td>3,000</td>
<td>4,100</td>
<td>4,900</td>
</tr>
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Food Service Facilities

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant Seats</td>
<td>240</td>
<td>330</td>
<td>390</td>
</tr>
<tr>
<td>Snack Stand Windows</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Sales Space (m²)</td>
<td>930</td>
<td>2,080</td>
<td>3,630</td>
</tr>
<tr>
<td>Parking Spaces Required</td>
<td>200</td>
<td>280</td>
<td>330</td>
</tr>
</tbody>
</table>

These estimates are preliminary and, in the case of parking, tentative in nature. In the absence of a reliable local frame of reference as to just how many visitors are likely to arrive by car, it is impossible to gauge this requirement with any great accuracy. This is a major and critical area of the planning program that must be more definitively addressed at an early date to ensure that adequate land area is set aside.

PRELIMINARY FINANCIAL ANALYSIS

The proposed attraction’s financial performance ultimately depends on such
factors as admission charges, visitor expenditures, concession policy, and the cost of building and operating the complex. These factors are discussed in the following paragraphs.

Estimated Operating Revenues

Operating revenue at the proposed attraction will be derived from visitor expenditures on admissions, food and beverage service, merchandise sales, and ancillary facilities not covered by the general admission charge. The level of expenditure achieved in each of these categories is a function of visitor length of stay in the park and pricing policy adopted by park management. Given the envisioned scope and quality of the proposed attraction, which is geared to a length of stay of about four to 4.5 hours, HPC has assumed an admission charge of about $0.25 (MN 5) for the public section of the park, with children under four years of age admitted free. After adjusting for attendance mix (adult-to-child ratio), the weighted average admission fee amounts to roughly $0.20 (MN 4) per capita. The addition of estimates for food/beverage, merchandise, and miscellaneous spending brings total per capita visitor expenditures to $1.35 (MN 29) in 1981, as shown below:

<table>
<thead>
<tr>
<th>Estimated Per Capita Expenditure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>$0.20 MN 4</td>
</tr>
<tr>
<td>Food/Beverage</td>
<td>0.75 17</td>
</tr>
<tr>
<td>Merchandise</td>
<td>0.20 4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>0.20 4</td>
</tr>
<tr>
<td>Total</td>
<td>$1.35 MN 29</td>
</tr>
</tbody>
</table>

For future years, a uniform inflation rate of 10 percent per annum has been assumed, reflecting the higher rate of price increase being experienced in Mexico vis-a-vis the United States. Given this factor and further allowing for slight shifts in attendance mix over the planning period, per capita expenditures will total $2.16 (MN 48) in 1986, and $3.15 (MN 71) in 1990.

Estimates for the aquarium operation are as follows:
Estimated Per Capita Expenditure

<table>
<thead>
<tr>
<th>Admissions</th>
<th>$3.95</th>
<th>89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food/Beverage</td>
<td>3.85</td>
<td>87</td>
</tr>
<tr>
<td>Merchandise</td>
<td>1.55</td>
<td>35</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>0.65</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$10.00</strong></td>
<td><strong>226</strong></td>
</tr>
</tbody>
</table>

After allowing for inflation, per capita expenditures will rise to $16.05 (MN 362) in 1986 and $23.55 (MN 530) in 1990. These estimates are, of course, preliminary and should any change be made in the attraction's proposed content, visitor spending potential could be affected and the foregoing estimates would then require revision.

Total gross operating revenues from all visitor spending at the public section of the park will amount to some $3.1 million (MN 67.3 million) in the initial year, rising to approximately $11.4 million (MN 258.1 million) by 1990. Total gross revenue estimates for the aquarium operation are about $8.4 million (MN 189.8 million) in the first year of operation and $32.9 million (MN 739.4 million) at the end of the planning period. The largest source of revenue in the public operation will be food and beverage sales, with 56 percent of the total, while the chief revenue-generators in the aquarium section will be food sales and admissions, each providing 39 percent of the total.

To arrive at net revenue, HPC assumed that all operations save admissions and minor services would be operated by concessionaires. Various figures denoting a percentage of gross sales were then applied in these categories as derived from typical practice in the United States, yielding the revenue accruing to the park's operating entity. On the basis of the assumptions just described, net operating revenue is equivalent to $929,000 (MN 19.1 million) for the public park section in 1981, increasing to $3.3 million (MN 67.0 million) by 1990. Corresponding estimates for the aquarium section are about $4.1 million (MN 91.5 million) and $15.9 million (MN 357.7 million), respectively. Amphitheater and observation tower revenues were then separately estimated, bringing overall total net operating revenues accruing from
all activities—public park, aquarium, amphitheater, and observation tower—to the following:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenues to Operating Entity (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$ 6,625 MN 147,376</td>
</tr>
<tr>
<td>1986</td>
<td>14,453 325,926</td>
</tr>
<tr>
<td>1990</td>
<td>25,485 566,306</td>
</tr>
</tbody>
</table>

As indicated, aggregate revenues to the park's operating entity will range from $6.6 million (MN 147.4 million) to $25.5 million (MN 566.3 million) over the forecast period.

Estimated Operating Expenses

Projected operating costs of the proposed attraction are highlighted below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Operating Expenses (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$ 5,334 MN 118,756</td>
</tr>
<tr>
<td>1986</td>
<td>11,646 262,439</td>
</tr>
<tr>
<td>1990</td>
<td>20,594 458,763</td>
</tr>
</tbody>
</table>

The largest proportion of total operating expense, amounting to $5.3 million (MN 118.8 million) in 1981 and $20.6 million (MN 458.8 million) by 1990, will be incurred in labor, estimated at some 40 percent of the indicated totals. Other large expense components include contract management at 11 percent of the total operating expense and advertising and promotion at 10 percent of operating expense. These figures also include the 10-percent annual inflation allowance and are preliminary in nature. Overall, these expenses represent 80 percent of total net revenue, a very high ratio for facilities of this type, but indicative of the low revenue-generation potential of public operations at the site, which are in effect subsidized by the aquarium operation.

Estimated Total Net Operating Income

Deducting estimated expenses from estimated revenues yields the following
projections of net operating income:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Net Operating Income (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$1,291 28,620</td>
</tr>
<tr>
<td>1986</td>
<td>2,807 63,487</td>
</tr>
<tr>
<td>1990</td>
<td>4,891 107,543</td>
</tr>
</tbody>
</table>

The initial year figure of approximately $1.3 million (MN 28.6 million) is equivalent to roughly 5 percent of total initial development costs (or 8 percent of the government share of those costs), which is an exceedingly poor rate of return that would not represent a profitable opportunity for a private commercial developer. Given non-profit public operation of the subject attraction, however, the residual funds generated by operations can be used to expand and upgrade the facilities as time goes on, with such expenditures considered essential to ensure sufficient entertainment capacity and to stimulate repeat visitation. On a cumulative basis, net operating income amounts to approximately $28.8 million as of the end of the 10-year planning period, which should be adequate to support a fairly extensive ongoing expansion program and provide for sustained competitive ability.
Section 3
SITE AND MARKET ENVIRONMENT

Two necessary prerequisites in determining the feasibility of the proposed attraction are a review of the site environment and an evaluation of available market support as derived from both resident and tourist sources. This section of the report thus is devoted to these basic considerations.

LOCATIONAL SETTING

The following paragraphs describe the subject property relative to such key locational factors as access patterns, surrounding land uses, exposure to sources of market support, and weather conditions.

Site Characteristics

The site selected for the proposed development is located almost dead-center in the crescent formed by Acapulco Bay, as depicted in Figure 1. It was the site of the now-defunct Papagayo Hotel, an Acapulco landmark for many years, which eventually became too outmoded to function efficiently as a hotel and was demolished. Some 20 hectares are contained in the approximately rectangular site, with some 650 meters of frontage on the Costera Miguel Aleman, which forms the southern boundary of the property. Other boundaries include Calle Juan Sebastian El Cano on the west, Avenida Cuauhtemoc on the north, and Calle Gonzalo Gomez on the east. Most of the site is level, the exception being a 35-meter hillock which rises abruptly in the northeast corner of the property. There is a fairly extensive amount of vegetation on the site, including several large specimen trees, most of which will be retained and incorporated into the landscaping plan of the proposed attraction. Across the Costera from the site is an excellent public beach. While the latter must remain in the public domain, there are opportunities to integrate the site with the beach frontage by means of a pedestrian overpass across the Costera. Furthermore, some development—a restaurant or beach club, for example—is possible on the small rock outcropping extending from the beach out into Acapulco Bay.
Figure 1

SITE ORIENTATION MAP

Key to Leading Hotels:
1. Acapulco Princess (716)
2. Pierre Marques (214)
3. Ramada Inn (203)
4. Las Brisas (262)
5. Hyatt Regency (695)
6. La Palapa (na)
7. Holiday Inn (362)
8. El Presidente (391)
9. Villa Los Arcos (22)
10. Acapulco Malibu (62)
11. Villa Vera (62)
12. Condesa del Mar (475)
13. Acapulco Continental (na)
14. Ritz Marriott (141)
15. Paraiso Marriott (442)
* Other good-quality hotels
Access Conditions

Excellent access to the subject property is provided by the Costera, a broad thoroughfare that is one of the major arterials in Acapulco, connecting directly with the airport some 20 kilometers east of the site. Virtually all foreign tourists to Acapulco arrive by air and rely largely on taxis, charter buses, and rented vehicles for sightseeing and other activities while in the city. Direct flights to Acapulco are available from many points in North America, with air routing from other points throughout the world available through Mexico City. Domestic tourists, originating mainly in Mexico City, depend principally on private autos and public buses for travel to Acapulco, although air travel is also important for this market segment.

Surrounding Land Uses

Most of the land surrounding the subject property is developed, reflecting the urban character of the Acapulco resort complex. As indicated in Figure 1, most of the city's hotel inventory is concentrated along the Costera, with several major facilities so located. Other concentrations include the Revolcadero Beach area between Acapulco Bay and the airport and the Galeta Beach-Quebrada area on the western shore of the bay. The subject property is excellently situated with respect to these concentrations and is furthermore well exposed to permanent residents through location along a major commuting route in the heart of the city.

Climate Characteristics

The success of Acapulco as a resort destination is largely associated with its amenable climate, particularly during winter months. The general classification of the Acapulco area is "tropical savanna," a designation shared with the southern part of Florida in the United States. This type of climate is characterized by warm, dry winters and hot, wet summers, as indicated by the data shown in Table 1. Very little month-to-month temperature variation is experienced in Acapulco, and the overall annual average temperature amounts to 27.5°C. An extremely wide variation is experienced in rainfall, however, with 94 percent of the annual total of 1,413 millimeters recorded in the period June-October. Virtually no rain, on the other hand, falls in the
<table>
<thead>
<tr>
<th>Month</th>
<th>Average Daily Temperature (Degrees C)</th>
<th>Total Precipitation (millimeters)</th>
<th>Relative Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>26.1</td>
<td>8.7</td>
<td>74.4 %</td>
</tr>
<tr>
<td>February</td>
<td>26.2</td>
<td>1.0</td>
<td>73.1 %</td>
</tr>
<tr>
<td>March</td>
<td>26.6</td>
<td>0.2</td>
<td>73.4 %</td>
</tr>
<tr>
<td>April</td>
<td>27.2</td>
<td>1.0</td>
<td>73.8 %</td>
</tr>
<tr>
<td>May</td>
<td>18.5</td>
<td>37.9</td>
<td>73.8 %</td>
</tr>
<tr>
<td>June</td>
<td>28.5</td>
<td>322.9</td>
<td>76.3 %</td>
</tr>
<tr>
<td>July</td>
<td>28.6</td>
<td>231.7</td>
<td>75.9 %</td>
</tr>
<tr>
<td>August</td>
<td>28.7</td>
<td>238.8</td>
<td>75.0 %</td>
</tr>
<tr>
<td>September</td>
<td>27.9</td>
<td>353.9</td>
<td>78.1 %</td>
</tr>
<tr>
<td>October</td>
<td>27.9</td>
<td>174.4</td>
<td>77.2 %</td>
</tr>
<tr>
<td>November</td>
<td>27.5</td>
<td>32.6</td>
<td>75.8 %</td>
</tr>
<tr>
<td>December</td>
<td>26.6</td>
<td>9.8</td>
<td>74.7 %</td>
</tr>
<tr>
<td><strong>Annual</strong></td>
<td><strong>27.5</strong></td>
<td><strong>1,412.9</strong></td>
<td><strong>75.1 %</strong></td>
</tr>
</tbody>
</table>

1 Based on a 20-year average.  
2 Based on a 37-year average.  
3 Based on a 17-year average.  

Source: Servicio Meteorologico Mexicano
February-April period, with other months recording only modest amounts. Average annual relative humidity is approximately 75 percent, again with little variation throughout the year.

Table 2 presents a comparison of Acapulco's weather characteristics with those of selected US cities where major aquarium attractions have been developed. The only city shown receiving more rain than Acapulco is Miami, Florida, and none of the US cities reports a higher average temperature. Both Florida cities shown, however, report higher relative humidity levels. In direct contrast to Acapulco are the comparatively dry, very temperate Southern California aquarium sites.

Weather characteristics, of course, do not in themselves limit potential for major aquarium development, as demonstrated by the above data, which show successful marine attractions in very diverse climates. The large amount of summer rainfall in Acapulco nevertheless has certain design implications, particularly in view of the fact that it tends to be a nighttime phenomenon. After-dark hours are the most recreationally active part of the day in Acapulco, owing to the local custom of the long midday business recess, which has the effect of deferring dinner and entertainment outings until very late in the evening (after 10 p.m.). Clearly, attention must be given in facility design plans to provide rain protection in the form of roofs, building overhangs, and awnings. Such features also afford protection from the hot sun during daylight hours and will enhance visitor comfort at any time of day or evening. While it is true that Acapulco is still primarily a winter-oriented resort, winter weather conditions being highly favorable and requiring no special measures, the amount of summer business has been increasing in recent years and will probably continue to grow in importance as Acapulco achieves true year-round status (as in Hawaii). Furthermore, the local resident market is free to attend throughout the year. An adequate amount of weather-proofing is thus considered mandatory in order to maximize the length of the operating schedule and thereby improve market performance.

AVAILABLE MARKET SUPPORT

Another key determinant of the potential of Acapulco as a major aquarium location is available market size. Especially important is the health of the
### Table 2

**COMPARATIVE WEATHER CONDITIONS**

<table>
<thead>
<tr>
<th>City</th>
<th>Average Annual Mean Temperature (Degrees C)</th>
<th>Total Annual Precipitation (Millimeters)</th>
<th>Average Annual Relative Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acapulco</td>
<td>27.5</td>
<td>1,413</td>
<td>75 %</td>
</tr>
<tr>
<td>San Diego (Sea World)</td>
<td>17.2</td>
<td>240</td>
<td>61</td>
</tr>
<tr>
<td>Los Angeles (Marineland)</td>
<td>16.5</td>
<td>294</td>
<td>62</td>
</tr>
<tr>
<td>Orlando (Sea World)</td>
<td>22.1</td>
<td>1,300</td>
<td>88</td>
</tr>
<tr>
<td>Miami (Seaquarium)</td>
<td>24.2</td>
<td>1,518</td>
<td>84</td>
</tr>
<tr>
<td>Honolulu (Sea Life Park)</td>
<td>24.8</td>
<td>581</td>
<td>70</td>
</tr>
</tbody>
</table>

**Note:** Figures for US cities are based on 30-year averages; figures for Acapulco are as noted on Table 1.

**Source:** Servicio Meteorologico Mexicano, and US National Oceanographic and Atmospheric Administration
local tourist industry, since tourists will be an important source of support for the proposed attraction. Trends and characteristics of the available resident and tourist markets are subsequently analyzed.

Resident Market

The population of the greater Acapulco area constitutes the available resident market. Other factors being equal, the propensity to visit recreation attractions invariably decreases with distance from the site. In estimating attendance, therefore, it is not only important to ascertain the total size of the available market, but also its geographic distribution. The resident market for the proposed attraction has accordingly been divided into two segments defined on the basis of distance.

Market Size

The latest official census of Acapulco was conducted in 1975, at which time the total population of the Municipio de Acapulco (a jurisdiction encompassing the city of Acapulco plus surrounding rural areas) was reported at some 400,000 persons, as presented in Table 3. The city itself accounts for about 80 percent of this total, with roughly 325,000 residents. All of the latter are located within a half-hour drive of the subject site and are thus defined as the primary resident market. For these nearby residents, travel time and cost will not constitute major factors in deciding whether or not to visit the proposed attraction, since they can travel to the site, spend several hours there, and return home easily within one day or less.

The table also shows the breakdown of city population by individual census zone, and a high degree of concentration is evident. The most populous sector of the city is Zone 7, with more than one fourth of the Municipio total and about one third of the city total. Other major concentrations are Zones 4, 5, and 11, each having a share of 10 percent or more. As the map in Figure 2 illustrates, the subject site is immediately adjacent to the densely populated Zone 7 and is in close proximity to the other important residential neighborhoods. A large segment of the primary market population thus resides within a short distance: some 42 percent of the Municipio total within two miles, and the entire 80-percent urban component within about 10 miles.
## Table 3

**POPULATION OF ACAPULCO BY CENSUS ZONE**

### 1975

<table>
<thead>
<tr>
<th>Zone</th>
<th>Total Population</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,414</td>
<td>0.6 %</td>
</tr>
<tr>
<td>2</td>
<td>13,761</td>
<td>3.4</td>
</tr>
<tr>
<td>3</td>
<td>2,605</td>
<td>0.7</td>
</tr>
<tr>
<td>4</td>
<td>48,557</td>
<td>12.1</td>
</tr>
<tr>
<td>5</td>
<td>45,418</td>
<td>11.3</td>
</tr>
<tr>
<td>6</td>
<td>4,073</td>
<td>1.0</td>
</tr>
<tr>
<td>7</td>
<td>102,551</td>
<td>25.6</td>
</tr>
<tr>
<td>8</td>
<td>19,398</td>
<td>4.8</td>
</tr>
<tr>
<td>9</td>
<td>11,984</td>
<td>3.0</td>
</tr>
<tr>
<td>10</td>
<td>4,800</td>
<td>1.2</td>
</tr>
<tr>
<td>11</td>
<td>43,784</td>
<td>10.9</td>
</tr>
<tr>
<td>12</td>
<td>7,228</td>
<td>1.8</td>
</tr>
<tr>
<td>13</td>
<td>12,712</td>
<td>3.2</td>
</tr>
<tr>
<td>14</td>
<td>7,027</td>
<td>1.8</td>
</tr>
</tbody>
</table>

| Subtotal | 326,312 | 81.4 % |

**Remainder of Municipio Acapulco (rural area)**

| Total Population | 74,678 | 18.6 % |

**Total**

| Total | 400,990 | 100.0 % |

---

**Source:** Government of the State of Guerrero, Special Census of Population and Housing in the Municipio de Acapulco, 1975, and Harrison Price Company.
Residents of outlying rural areas, totaling some 75,000 persons, comprise the secondary resident market. Visits from this market area will require a 45-to 90-minute drive, indicating that it will still be possible to visit the proposed attraction and return home the same day, but with a slightly greater commitment in time and travel cost than for residents of the primary market. The frequency of visitation from this area will thus be lower than that of the former area.

For residents of remaining parts of the state of Guerrero (including the cities of Chilpancingo, Taxco, Iguala, and Chilapa, among others), a drive of two to four hours will be required to visit the subject attraction. A major portion of the day must thus be devoted to travel and an overnight stay will usually be indicated. These residents are thus more properly categorized as part of the domestic excursionist market (to be discussed subsequently) rather than the local resident market.

The foregoing population data refer to 1975. Although unofficial, the commonly reported current population of Acapulco is an estimated 600,000 persons which, if accurate, suggests an extremely rapid growth rate in recent years (about 14 percent annually). This exceptional rate of growth, however, is not inconsistent with historical experience. From 1960 to 1970, Acapulco grew at a rate of 13.5 percent annually, while from 1970 to 1975, the rate was a phenomenal 18 percent per year. For purposes of this preliminary analysis, therefore, HPC will utilize the unofficial estimate of 600,000 people. Obviously, if growth rates of recent magnitude are sustained, the resident market could double or even triple in size by the end of the 10-year planning period. However, an enormous increase in infrastructure (particularly the municipal water system) and in employment opportunities (which are heavily concentrated in the visitor industry) is implied by such high growth rates. Given the logistics of infrastructure development and the fact that Acapulco's visitor industry appears to have reached maturity and cannot expect to record the kind of dramatic expansion that has occurred in the past decade, it appears more reasonable to anticipate a deceleration of growth in the future.

Assuming that the rate of increase declines to perhaps 7 percent annually in the near future (which is still twice the rate of growth being experienced in
Mexico as a whole), the total resident market population would amount to some 735,000 persons by 1981 (the projected first full year of operation for the proposed attraction). If the urban/rural split has held constant since the 1975 census, the primary market population is estimated at 590,000 persons, and the secondary market population, at 145,000 people. While open to refinement as more definitive data become available, the latter estimates will suffice for preliminary planning purposes. A further reduction in the pace of growth to 5 percent per year through 1986 and to 3.5 percent annually thereafter would yield a total resident market of 940,000 people in 1986, and about 1.1 million in 1990.

**Socioeconomic Characteristics**

As to market demographics, the salient characteristic of the Acapulco market is its youth. As shown in Table 4, the median age is a mere 17 years (only half the current median in the United States), with one third of the total population being under 10 years of age. Reflecting the large number of children, average family size is a relatively high 5.5 persons (compared to less than three persons in the US), as presented in Table 5. Clearly, a favorable market situation exists for a family-oriented attraction emphasizing recreation opportunities that appeal to children and teenagers. There is, furthermore, a dearth of family-oriented recreation facilities in Acapulco at the present time, suggesting that high market penetration rates can be attained, particularly in view of the nominal general admission charge envisioned for one major section of the proposed attraction (refer to the discussion in Section 4). A high level of repeat visitation, especially among residents of the immediate Acapulco area, is also anticipated.

Data allowing an accurate measurement of the relative affluence of the available resident market are unavailable. There are, nevertheless, certain statistics which will provide a general indication of propensity to spend on leisure-related goods and activities. Table 6 indicates automobile and television set ownership, telephone usage, and movie attendance ratios for Acapulco, the state of Guerrero, Mexico, and the United States. With respect to the first three factors, Acapulco is positioned at or above the national average for Mexico (substantially above in the case of telephone ownership)
Table 4

AGE DISTRIBUTION OF THE ACAPULCO POPULATION
1975

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 years</td>
<td>123,680</td>
<td>30.8 %</td>
</tr>
<tr>
<td>10 - 14 years</td>
<td>57,446</td>
<td>14.3</td>
</tr>
<tr>
<td>15 - 19 years</td>
<td>42,916</td>
<td>10.7</td>
</tr>
<tr>
<td>20 - 29 years</td>
<td>72,666</td>
<td>18.1</td>
</tr>
<tr>
<td>30 - 39 years</td>
<td>54,206</td>
<td>13.5</td>
</tr>
<tr>
<td>40 - 59 years</td>
<td>37,917</td>
<td>9.5</td>
</tr>
<tr>
<td>60 - 74 years</td>
<td>8,670</td>
<td>2.2</td>
</tr>
<tr>
<td>More than 75 years</td>
<td>3,489</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>400,990</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

Median Age (years) 17.3

Table 5

FAMILY SIZE CHARACTERISTICS
OF THE ACAPULCO POPULATION
1975

<table>
<thead>
<tr>
<th>Census Zone</th>
<th>Number of Housing Units</th>
<th>Population Per Housing Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Owner</td>
<td>Renter</td>
</tr>
<tr>
<td>1</td>
<td>248</td>
<td>202</td>
</tr>
<tr>
<td>2</td>
<td>1,703</td>
<td>993</td>
</tr>
<tr>
<td>3</td>
<td>204</td>
<td>268</td>
</tr>
<tr>
<td>4</td>
<td>6,637</td>
<td>2,561</td>
</tr>
<tr>
<td>5</td>
<td>5,594</td>
<td>2,273</td>
</tr>
<tr>
<td>6</td>
<td>307</td>
<td>529</td>
</tr>
<tr>
<td>7</td>
<td>10,737</td>
<td>7,142</td>
</tr>
<tr>
<td>8</td>
<td>1,344</td>
<td>2,700</td>
</tr>
<tr>
<td>9</td>
<td>804</td>
<td>1,696</td>
</tr>
<tr>
<td>10</td>
<td>489</td>
<td>550</td>
</tr>
<tr>
<td>11</td>
<td>6,107</td>
<td>1,065</td>
</tr>
<tr>
<td>12</td>
<td>1,131</td>
<td>149</td>
</tr>
<tr>
<td>13</td>
<td>1,277</td>
<td>1,310</td>
</tr>
<tr>
<td>14</td>
<td>604</td>
<td>823</td>
</tr>
<tr>
<td>Subtotal</td>
<td>37,186</td>
<td>22,261</td>
</tr>
</tbody>
</table>

Remainder of Municipal Acapulco (rural area)

<table>
<thead>
<tr>
<th></th>
<th>Owner</th>
<th>Renter</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,684</td>
<td>2,394</td>
<td>12,078</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46,870</td>
<td>24,655</td>
<td>71,525</td>
</tr>
</tbody>
</table>

Table 6

INDICATORS OF LIVING AND LEISURE STANDARDS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Acapulco</th>
<th>State of Guerrero</th>
<th>Mexico</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger cars per thousand inhabitants (1970)</td>
<td>29</td>
<td>6</td>
<td>26</td>
<td>437</td>
</tr>
<tr>
<td>Television sets per thousand inhabitants (1972)</td>
<td>82</td>
<td>na</td>
<td>82</td>
<td>562</td>
</tr>
<tr>
<td>Telephones per thousand inhabitants (1970)</td>
<td>112</td>
<td>na</td>
<td>31</td>
<td>587</td>
</tr>
<tr>
<td>Per capita annual cinema attendance (1970)</td>
<td>na</td>
<td>3.4</td>
<td>5.2</td>
<td>5.0</td>
</tr>
</tbody>
</table>

na means not available.

where ratios commonly range between 5 and 15 percent of the US level. Of greater significance to this analysis, however, is the incidence of movie attendance, one of the more popular commercial entertainment options in Mexico. Mexico's attendance ratio slightly exceeds that of the US, as shown, while the figure for the state of Guerrero is considerably below both national and US averages. The latter is probably explained by the limited inventory of cinema facilities in Guerrero vis-a-vis, for example, Mexico City, but may also reflect lower spendable income levels.

With respect to income, the most recent data for Acapulco are for 1972, at which time the distribution was as follows:

<table>
<thead>
<tr>
<th>Per Capita Income</th>
<th>1972</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than MN 1,000</td>
<td>58.0%</td>
</tr>
<tr>
<td>MN 1,000-2,499</td>
<td>28.0%</td>
</tr>
<tr>
<td>MN 2,500-4,999</td>
<td>8.9%</td>
</tr>
<tr>
<td>MN 5,000 or more</td>
<td>5.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

As indicated, nearly 60 percent of the Acapulco population earned less than 1,000 pesos annually, while 86 percent earned less than 2,500 pesos per year. These income figures are outdated; however, even though absolute incomes may have risen substantially since 1972, the relative proportion of the population at each income level has probably not recorded any drastic change. Income limitations of a sizable component of the resident market must therefore be taken into account in establishing the pricing policy for the proposed attraction.

**Tourist Market**

The second principal market available to the subject facility is comprised of non-resident visitors to Acapulco, including both foreign and domestic tourists. To allow a perspective on the visitor industry, the following paragraphs present an overview of tourism in Mexico as a whole, and then focus on the Acapulco area.
Overview of Mexico Tourism

Mexico's amenable climate, fine beach resorts, and wealth of historical/cultural attractions have provided the foundation for a thriving tourist industry. Table 7 traces growth in visitation to the interior of Mexico over the past 20 years (the term "interior" refers to the area not located along the US/Mexico border in order to distinguish the very large volume of casual day-visitor to the border region from destination tourists). As indicated, very rapid growth was recorded during the 1960s and early 1970s, averaging some 12 percent annually. From a 1957 volume of 662,000, total visitation rose to roughly 3.4 million by 1974, a five-fold increase. In 1974-75, however, the effects of worldwide economic pressures and a diplomatic controversy with the US induced a decline in visitor numbers. During this period, substantial price increases were experienced in goods and services purchased by tourists, and a 15-percent consumption tax was temporarily imposed in bars, restaurants, and nightclubs. While the tax was subsequently modified some six months later to exempt foreign visitors, several large group cancellations had already occurred, and visitation was off sharply. The decrease in tourism persisted through 1976 as a result of Mexico's December 1975 vote on a controversial United Nations resolution, which caused further cancellations among tourist and convention groups.

By 1977, however, the industry began to recover from these difficulties and now appears to be on an upward course once again. Price increases nevertheless continue to be a problem, which has heightened competition with Hawaii and the Caribbean (where comparable package tours can typically be purchased for as little as 50 percent of the Mexican price). However, the worsening oil situation and its effect on airfares may soon reduce the price differential enjoyed by many competing areas. Recognizing the economic significance of tourism, development programs in the visitor industry have intensified, with ambitious plans underway for nationwide expansion of the hotel room inventory, development of new resort sites, encouragement of travel from new market areas (such as the eastern and southern US), and provision of needed tourist infrastructure. The combined impact of these various programs is expected to produce a total visitor count of more than 14 million by the end of the century, a quadrupling of the present volume. The annual rate of growth
### Table 7

**TRENDS IN TOURISM TO MEXICO**

1957 - 1977

(Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Tourists</th>
<th>Percent Change Over Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>662</td>
<td>--</td>
</tr>
<tr>
<td>1958</td>
<td>697</td>
<td>5.4 %</td>
</tr>
<tr>
<td>1959</td>
<td>746</td>
<td>7.0</td>
</tr>
<tr>
<td>1960</td>
<td>761</td>
<td>1.9</td>
</tr>
<tr>
<td>1961</td>
<td>803</td>
<td>5.6</td>
</tr>
<tr>
<td>1962</td>
<td>941</td>
<td>17.2</td>
</tr>
<tr>
<td>1963</td>
<td>1,058</td>
<td>12.4</td>
</tr>
<tr>
<td>1964</td>
<td>1,210</td>
<td>14.4</td>
</tr>
<tr>
<td>1965</td>
<td>1,350</td>
<td>11.6</td>
</tr>
<tr>
<td>1966</td>
<td>1,499</td>
<td>11.0</td>
</tr>
<tr>
<td>1967</td>
<td>1,629</td>
<td>8.7</td>
</tr>
<tr>
<td>1968</td>
<td>1,879</td>
<td>15.4</td>
</tr>
<tr>
<td>1969</td>
<td>2,065</td>
<td>9.9</td>
</tr>
<tr>
<td>1970</td>
<td>2,250</td>
<td>9.0</td>
</tr>
<tr>
<td>1971</td>
<td>2,510</td>
<td>11.5</td>
</tr>
<tr>
<td>1972</td>
<td>2,912</td>
<td>16.0</td>
</tr>
<tr>
<td>1973</td>
<td>3,239</td>
<td>11.2</td>
</tr>
<tr>
<td>1974</td>
<td>3,362</td>
<td>3.8</td>
</tr>
<tr>
<td>1975</td>
<td>3,218</td>
<td>(4.3)</td>
</tr>
<tr>
<td>1976</td>
<td>3,107</td>
<td>(3.4)</td>
</tr>
<tr>
<td>1977</td>
<td>3,237</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Average Annual Rate of Increase:**

<table>
<thead>
<tr>
<th>Period</th>
<th>Average</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957 - 1962</td>
<td>56</td>
<td>7.3 %</td>
</tr>
<tr>
<td>1962 - 1967</td>
<td>138</td>
<td>11.6</td>
</tr>
<tr>
<td>1967 - 1972</td>
<td>257</td>
<td>12.3</td>
</tr>
<tr>
<td>1972 - 1977</td>
<td>65</td>
<td>2.1</td>
</tr>
<tr>
<td>1957 - 1977</td>
<td>129</td>
<td>8.3</td>
</tr>
</tbody>
</table>

---

1 Includes Mexican nationals residing abroad.

Source: Mexico Secretariat of Tourism, Banco de Mexico, and Harrison Price Company.
implied by this forecast is some 6 to 7 percent, or slightly less than the 8 percent recorded over the last two decades.

Total expenditures of tourists to Mexico, exclusive of international airfares, currently amount to some $867 million (MN 19.5 billion), as indicated in Table 8. This is equivalent to a per capita expenditure of $267 (MN 6,000), or about $26 (MN 585) on a daily basis, given the prevailing 10.4-day average length of stay. The breakdown of this expenditure by category is shown in Table 9. Food and beverage represents the largest single outlay, with 29 percent of the total, followed by accommodations, with 25 percent. Along with food spending, categories of interest to this analysis are entertainment and handicrafts, where spending totals $5.70 (MN128) daily per visitor and accounts for 22 percent of total spending.

Table 10 presents the mode of arrival for visitors to Mexico during recent years. It can be seen that air travel has become increasingly important and now accounts for more than half of all arrivals. The decline in share for surface modes reflects primarily two factors: (1) the increasing cost of gasoline, which inhibits long-distance travel via private automobile; and (2) an increase in the proportion of arrivals from areas not accessible by most surface modes (Europe and the Far East, for example). While a breakdown by type of surface mode is not available, it may be presumed that arrivals via cruise ship through the major ports of call on the West Coast of Mexico have been increasing, and probably at substantial rates owing to the immense popularity currently enjoyed by the cruise industry. However, growth in this component is not likely to alter the overall pattern of decline in surface arrivals due to the comparatively small number of people involved.

Among air travelers, pleasure is by far the most important motivation for visiting Mexico, accounting for nearly three fourths of all visitors, as presented in Table 11. Business is also significant, with 13 percent of the total, along with visits to friends and relatives at 11 percent. Quite a different pattern is characteristic of surface arrivals, where only half of all visitors are pleasure-motivated, and some 45 percent indicate visits with family and friends as a primary travel factor.
Table 8
EXPENDITURES OF TOURISTS TO MEXICO
1974 - 1977

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Expenditures (thousands)</th>
<th>Per Capita Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>$842,043</td>
<td>$250</td>
</tr>
<tr>
<td>1975</td>
<td>800,132</td>
<td>249</td>
</tr>
<tr>
<td>1976</td>
<td>835,590</td>
<td>269</td>
</tr>
<tr>
<td>1977</td>
<td>866,526</td>
<td>268</td>
</tr>
</tbody>
</table>

Average Annual Rate of Increase 1.0 % 2.4 %

---

1 Excludes border-area tourism; includes Mexican nationals residing abroad.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
Table 9
DISTRIBUTION OF TOURIST SPENDING IN MEXICO
1977

<table>
<thead>
<tr>
<th></th>
<th>Total Per Capita Expenditure</th>
<th>Daily Per Capita Expenditure</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Beverage</td>
<td>$77.27</td>
<td>$7.43</td>
<td>29.0%</td>
</tr>
<tr>
<td>Accommodations</td>
<td>67.24</td>
<td>6.46</td>
<td>25.2%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>23.23</td>
<td>2.23</td>
<td>8.7%</td>
</tr>
<tr>
<td>Gasoline and Oil</td>
<td>16.80</td>
<td>1.62</td>
<td>6.3%</td>
</tr>
<tr>
<td>Local Transportation</td>
<td>21.36</td>
<td>2.05</td>
<td>8.0%</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>36.14</td>
<td>3.47</td>
<td>13.5%</td>
</tr>
<tr>
<td>Other Goods</td>
<td>16.16</td>
<td>1.55</td>
<td>6.1%</td>
</tr>
<tr>
<td>Other Services</td>
<td>8.51</td>
<td>0.82</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$266.71</strong></td>
<td><strong>$25.63</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

1 Based on an average length of stay of 10.4 days.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
Table 10
MODE OF ARRIVAL FOR VISITORS TO MEXICO¹
1974 - 1977
(Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Air</th>
<th></th>
<th>Surface²</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>1974</td>
<td>1,545</td>
<td>46 %</td>
<td>1,817</td>
<td>54 %</td>
<td>3,362</td>
<td>100 %</td>
</tr>
<tr>
<td>1975</td>
<td>1,432</td>
<td>44 %</td>
<td>1,786</td>
<td>56 %</td>
<td>3,218</td>
<td>100 %</td>
</tr>
<tr>
<td>1976</td>
<td>1,532</td>
<td>49 %</td>
<td>1,575</td>
<td>51 %</td>
<td>3,107</td>
<td>100 %</td>
</tr>
<tr>
<td>1977</td>
<td>1,723</td>
<td>53 %</td>
<td>1,514</td>
<td>47 %</td>
<td>3,237</td>
<td>100 %</td>
</tr>
</tbody>
</table>

Average Annual Change 1974-1977

|      |       |       | (101)   |       | (42)   |       |

¹ Excludes border-area tourism; includes Mexican nationals residing abroad.
² Includes auto, rail, bus, and ship arrivals.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
### Table 11

**PURPOSE OF VISITS TO MEXICO**
**BY MODE OF TRAVEL**
**(1974 - 1977)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasure</td>
<td>76.7 %</td>
<td>72.5 %</td>
<td>73.3 %</td>
<td>72.0 %</td>
<td>70.0 %</td>
<td>64.6 %</td>
<td>62.1 %</td>
<td>50.5 %</td>
</tr>
<tr>
<td>Business</td>
<td>12.5</td>
<td>12.6</td>
<td>13.3</td>
<td>13.3</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Visit with Friends or Relatives</td>
<td>5.7</td>
<td>10.1</td>
<td>9.1</td>
<td>11.4</td>
<td>25.9</td>
<td>30.6</td>
<td>33.8</td>
<td>44.8</td>
</tr>
<tr>
<td>Study</td>
<td>1.5</td>
<td>1.4</td>
<td>1.2</td>
<td>0.7</td>
<td>0.3</td>
<td>1.2</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Transit</td>
<td>1.0</td>
<td>1.4</td>
<td>1.1</td>
<td>1.4</td>
<td>1.6</td>
<td>1.9</td>
<td>2.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Other</td>
<td>2.6</td>
<td>2.0</td>
<td>2.0</td>
<td>1.2</td>
<td>1.6</td>
<td>1.1</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

---

1. Excludes border-area tourism; includes Mexican nationals residing abroad.

The tourist origin data contained in Table 12 illustrates the predominance of the United States in generating visitation to Mexico. Approximately 76 percent of all air arrivals and 93 percent of all surface arrivals were US-generated in 1977. The larger proportion of US residents among the surface component reflects the high incidence of visitation from border states, as indicated in Table 13. Texas alone contributes more than one third of all visitation, followed by California, with roughly 17 percent. The four border states together generated more than 60 percent of all tourism to Mexico. This pattern is expected to change somewhat in the future with the advent of the Cancun project and other major tourist destinations on the east coast of Mexico, which will draw a large number of visitors from the eastern half of the United States.

The air travel component of Mexico tourism is characterized by a high degree of affluence. Table 14 shows that more than half of all visitors arriving by air in 1977 earned more than $20,000 (MN 450,000) annually and that the proportion of arrivals in this income group has risen dramatically in recent years. Surface arrivals, on the other hand, are heavily concentrated in lower income categories, with some 60 percent earning between $3,000 and $15,000 (MN 67,500 to 337,500) per year. Although statistical data are unavailable, it is generally acknowledged that Acapulco depends largely on air arrivals within the foreign market segment, thus suggesting a qualitatively superior local tourist industry.

Tourism to Guerrero/Acapulco

Turning now to the localized tourist market from which the proposed attraction will draw, Table 15 presents the pattern of growth in visitation to the state of Guerrero. As indicated, total 1978 volume amounted to approximately 2.6 million visitors, up from 1.5 million in 1973, representing an average annual increase of more than 11 percent, or 217,000 people per year. It should be noted that these figures are not comparable to those shown earlier for Mexico overall in that they include domestic tourism in addition to the foreign market. Guerrero, and especially Acapulco, is a leading destination for the domestic market, particularly for residents of the densely populated Mexico City area some 350 kilometers to the northeast. The importance of the
Table 12
ORIGIN OF VISITORS TO MEXICO
BY MODE OF ARRIVAL
1974 - 1977

<table>
<thead>
<tr>
<th>Origin Area</th>
<th>Percent of Total Air Visitors</th>
<th>Percent of Total Surface Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>79.5%</td>
<td>77.1%</td>
</tr>
<tr>
<td>Canada</td>
<td>5.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Europe</td>
<td>6.7%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Latin America</td>
<td>6.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Other</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1 Excludes border-area tourism; includes Mexican nationals residing abroad.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
Table 13
ORIGIN OF US VISITORS TO MEXICO
1974 - 1977

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Border States:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>9.3%</td>
<td>8.6%</td>
<td>7.2%</td>
<td>7.5%</td>
</tr>
<tr>
<td>California</td>
<td>14.9%</td>
<td>15.7%</td>
<td>15.7%</td>
<td>16.6%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>3.1%</td>
<td>2.4%</td>
<td>2.2%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Texas</td>
<td>29.5%</td>
<td>34.6%</td>
<td>34.5%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>56.8%</td>
<td>61.3%</td>
<td>59.6%</td>
<td>62.4%</td>
</tr>
<tr>
<td>Other States:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>2.2%</td>
<td>2.2%</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Illinois</td>
<td>6.1%</td>
<td>5.7%</td>
<td>5.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Michigan</td>
<td>2.5%</td>
<td>1.8%</td>
<td>2.3%</td>
<td>2.1%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>New York</td>
<td>3.9%</td>
<td>3.5%</td>
<td>2.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Ohio</td>
<td>1.5%</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1.5%</td>
<td>1.3%</td>
<td>1.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Other</td>
<td>23.0%</td>
<td>20.2%</td>
<td>21.9%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>43.2%</td>
<td>38.7%</td>
<td>40.4%</td>
<td>37.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

1 Includes Mexican nationals residing in the United States.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
Table 14

INCOME DISTRIBUTION OF VISITORS TO MEXICO
BY MODE OF TRAVEL
1974 - 1977

<table>
<thead>
<tr>
<th>Annual Income Range</th>
<th>Percent of Total Air Visitors</th>
<th>Percent of Total Surface Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,000 or less</td>
<td>0.9 %</td>
<td>0.8 %</td>
</tr>
<tr>
<td>$3,000 - $10,000</td>
<td>9.7</td>
<td>7.4</td>
</tr>
<tr>
<td>$10,000 - $15,000</td>
<td>24.1</td>
<td>19.0</td>
</tr>
<tr>
<td>$15,000 - $20,000</td>
<td>29.6</td>
<td>28.7</td>
</tr>
<tr>
<td>More than $20,000</td>
<td>35.7</td>
<td>44.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

1 Excludes border-area tourism; includes Mexican nationals residing abroad.

Source: Banco de Mexico, Basic Tourism Statistics, 1978; and Harrison Price Company.
Table 15
TRENDS IN TOURISM TO THE STATE OF GUERRERO
1973 - 1978

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Tourists (thousands)</th>
<th>Average Annual Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>1,537</td>
<td>--</td>
</tr>
<tr>
<td>1974</td>
<td>1,667</td>
<td>130</td>
</tr>
<tr>
<td>1975</td>
<td>1,813</td>
<td>146</td>
</tr>
<tr>
<td>1976</td>
<td>1,975</td>
<td>162</td>
</tr>
<tr>
<td>1977</td>
<td>2,222</td>
<td>247</td>
</tr>
<tr>
<td>1978</td>
<td>2,622</td>
<td>400</td>
</tr>
</tbody>
</table>

Average 1973-1978 -- 217 11.3 %

---

1 Includes both foreign and domestic tourism.

Source: Acapulco Convention and Visitors Bureau, and Harrison Price Company.
domestic component is demonstrated by the steady growth in tourist visits to Guerrero, even during the 1974-1976 slump, when foreign visitation is known to have dropped off. Of all visitors during 1978, roughly half were foreigners and half were Mexican nationals, a split that has not changed substantially over the past five years.

The seasonal pattern of tourism to Guerrero, as presented in Table 16, reveals a strong winter orientation, when weather conditions are very attractive vis-a-vis major visitor origin areas. From December to March of 1978, more than 47 percent of the annual total was recorded. December is the peak month, with a 13-percent share. A slight secondary peak in visitation occurs during July and August, which together account for some 14 percent of the annual total. Local tourist industry officials state that there is little difference in seasonality between the foreign and Mexican national visitor markets. This is due to the fact that the traditional vacation periods for Mexicans are the Christmas holidays extending from December 15 to about January 3, and the Easter Holy Week period, usually in late March, both of which coincide with the winter peak in foreign visitation (during these hectic periods, not only are hotels filled to capacity, but beaches normally prohibited to campers are opened up in an effort to accommodate the overflow demand). In terms of physical planning, a peak month on the order of 13 percent for the market as a whole thus seems realistic.

There are three principal tourist destinations in the state of Guerrero: Acapulco, Taxco, and Zihuatanejo. Acapulco is by far the most important at the present time, accounting for nearly 90 percent of the statewide total, as shown in Table 17. This pattern is changing, however, due to the impact of the new Ixtapa development at Zihuatanejo some 250 kilometers north of Acapulco, which is beginning to divert a certain amount of tourist activity. To date, Ixtapa's diversionary impact is reported to be mainly on domestic tourism; however, it will not be long before foreign tourists are attracted in increasing numbers as well. In 1977, for example, Ixtapa recorded 103,000 total visitors, 78 percent of them Mexican nationals; and in 1978, 164,000 visitors were recorded, 75 percent of them Mexican nationals, indicating that the foreign market is growing faster. Fairly rapid growth can no doubt be expected at Zihuatanejo, probably to the detriment of Acapulco (among
<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Tourists</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>305,276</td>
<td>11.7 %</td>
</tr>
<tr>
<td>February</td>
<td>291,170</td>
<td>11.1 %</td>
</tr>
<tr>
<td>March</td>
<td>310,170</td>
<td>11.8 %</td>
</tr>
<tr>
<td>April</td>
<td>232,225</td>
<td>8.9 %</td>
</tr>
<tr>
<td>May</td>
<td>173,316</td>
<td>6.6 %</td>
</tr>
<tr>
<td>June</td>
<td>127,312</td>
<td>4.9 %</td>
</tr>
<tr>
<td>July</td>
<td>178,576</td>
<td>6.8 %</td>
</tr>
<tr>
<td>August</td>
<td>178,504</td>
<td>6.8 %</td>
</tr>
<tr>
<td>September</td>
<td>168,971</td>
<td>6.4 %</td>
</tr>
<tr>
<td>October</td>
<td>138,944</td>
<td>5.3 %</td>
</tr>
<tr>
<td>November</td>
<td>181,158</td>
<td>6.9 %</td>
</tr>
<tr>
<td>December</td>
<td>336,200</td>
<td>12.8 %</td>
</tr>
<tr>
<td>Total</td>
<td>2,621,822</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

Source: Acapulco Convention and Visitors Bureau, and Harrison Price Company.
<table>
<thead>
<tr>
<th></th>
<th>Acapulco</th>
<th>Taxco</th>
<th>Ixtapa-Zihuatanejo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1977</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nationals</td>
<td>1,052</td>
<td>45</td>
<td>80</td>
<td>1,177</td>
</tr>
<tr>
<td>Foreigners</td>
<td>897</td>
<td>125</td>
<td>23</td>
<td>1,045</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,949</td>
<td>170</td>
<td>103</td>
<td>2,222</td>
</tr>
<tr>
<td><strong>Percent Foreign</strong></td>
<td>46 %</td>
<td>74 %</td>
<td>22 %</td>
<td>47 %</td>
</tr>
<tr>
<td><strong>1978</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nationals</td>
<td>1,176</td>
<td>50</td>
<td>123</td>
<td>1,349</td>
</tr>
<tr>
<td>Foreigners</td>
<td>1,095</td>
<td>137</td>
<td>41</td>
<td>1,273</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,271</td>
<td>187</td>
<td>164</td>
<td>2,622</td>
</tr>
<tr>
<td><strong>Percent Foreign</strong></td>
<td>48 %</td>
<td>73 %</td>
<td>25 %</td>
<td>49 %</td>
</tr>
</tbody>
</table>

Percent Distribution of Total Tourism:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1977 - Nationals</strong></td>
<td>89 %</td>
<td>4 %</td>
<td>7 %</td>
</tr>
<tr>
<td></td>
<td>86</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>88</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>1978 - Nationals</strong></td>
<td>87</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>86</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>87</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Acapulco Convention and Visitors Bureau, and Harrison Price Company.
other factors, Ixtapa is a complete, master-planned resort community, which is inherently a more attractive destination environment than the extensively urbanized character of Acapulco).

Another important aspect of the local tourist market is convention activity. Acapulco is Mexico's leading convention site, and a large, modern convention center--the Centro Acapulco--was constructed a few years ago to serve the burgeoning convention trade, most of which is generated by foreign groups. Table 18 indicates that in 1977, nearly 900 separate events took place in Acapulco, for a total delegate count of almost 150,000 people (this compares to only 87 events and 53,000 delegates in in Mexico City, the second most important convention site in Mexico). It is noteworthy that Acapulco's convention market suffered from the previously discussed 1976 political controversy, but rebounded dramatically in 1977. Like visitation as a whole, the convention industry is by and large winter-oriented, with January and February alone contributing one third of total annual delegate volume.

In accordance with growth in visitor numbers, the accommodations plant in Acapulco has undergone rapid expansion in the past two decades. A summary of the inventory as of 1977 is contained in Table 19. Hotels, as shown, are the leading type of transient housing, representing approximately three fourths of the total room inventory. Roughly half of all hotel and other rooms available are rated "AA" or "A," the two classifications catering to foreign visitors, with a combined total of about 9,300 rooms in these categories. The category designated "condohotel" is a fairly recent development in Mexico. Becoming a member of a condohotel involves the purchase of shares in a complex which grants occupancy rights to a room in that complex. Several facilities of this type have been built in Acapulco, and it has been estimated that 60 percent of condohotel occupancy is generated by domestic tourists. The success of the concept has lead to proposals for further condohotel projects, which will probably increase in significance as time goes on.

Occupancy rates of leading Acapulco hotels currently average 70 percent on an annual basis, as indicated in Table 20. Rates are especially high during the peak December-March period and reach a seasonal low in June. It is
## Table 18

CONVENTION ACTIVITY IN ACAPULCO
1975 - 1977

<table>
<thead>
<tr>
<th>Month</th>
<th>1975 Number of Events</th>
<th>1975 Number of Delegates</th>
<th>1976 Number of Events</th>
<th>1976 Number of Delegates</th>
<th>1977 Number of Events</th>
<th>1977 Number of Delegates</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>71</td>
<td>2,732</td>
<td>54</td>
<td>10,641</td>
<td>93</td>
<td>29,934</td>
</tr>
<tr>
<td>February</td>
<td>45</td>
<td>11,269</td>
<td>55</td>
<td>6,275</td>
<td>98</td>
<td>20,220</td>
</tr>
<tr>
<td>March</td>
<td>77</td>
<td>15,288</td>
<td>55</td>
<td>8,900</td>
<td>63</td>
<td>15,041</td>
</tr>
<tr>
<td>April</td>
<td>68</td>
<td>11,437</td>
<td>40</td>
<td>5,690</td>
<td>60</td>
<td>10,702</td>
</tr>
<tr>
<td>May</td>
<td>62</td>
<td>10,090</td>
<td>28</td>
<td>6,665</td>
<td>42</td>
<td>5,645</td>
</tr>
<tr>
<td>June</td>
<td>21</td>
<td>4,996</td>
<td>30</td>
<td>4,923</td>
<td>55</td>
<td>8,348</td>
</tr>
<tr>
<td>July</td>
<td>21</td>
<td>3,679</td>
<td>28</td>
<td>3,472</td>
<td>49</td>
<td>10,718</td>
</tr>
<tr>
<td>August</td>
<td>42</td>
<td>5,110</td>
<td>32</td>
<td>3,917</td>
<td>61</td>
<td>6,154</td>
</tr>
<tr>
<td>September</td>
<td>27</td>
<td>3,178</td>
<td>40</td>
<td>5,021</td>
<td>48</td>
<td>5,354</td>
</tr>
<tr>
<td>October</td>
<td>57</td>
<td>19,842</td>
<td>69</td>
<td>11,970</td>
<td>100</td>
<td>8,948</td>
</tr>
<tr>
<td>November</td>
<td>54</td>
<td>15,868</td>
<td>56</td>
<td>7,792</td>
<td>120</td>
<td>12,924</td>
</tr>
<tr>
<td>December</td>
<td>39</td>
<td>5,410</td>
<td>36</td>
<td>4,249</td>
<td>104</td>
<td>13,738</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>584</strong></td>
<td><strong>118,899</strong></td>
<td><strong>523</strong></td>
<td><strong>79,515</strong></td>
<td><strong>893</strong></td>
<td><strong>147,726</strong></td>
</tr>
</tbody>
</table>

Table 19  
ACCOMMODATIONS INVENTORY IN ACAPULCO  
1977

<table>
<thead>
<tr>
<th>Type of Accommodations</th>
<th>AA</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotels</td>
<td>3,820</td>
<td>3,277</td>
<td>2,203</td>
<td>2,444</td>
<td>553</td>
<td>12,297</td>
</tr>
<tr>
<td>Motels</td>
<td>--</td>
<td>203</td>
<td>168</td>
<td>141</td>
<td>133</td>
<td>645</td>
</tr>
<tr>
<td>Condohotels</td>
<td>--</td>
<td>1,445</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1,445</td>
</tr>
<tr>
<td>Condominiums</td>
<td>115</td>
<td>183</td>
<td>89</td>
<td>110</td>
<td>--</td>
<td>497</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>--</td>
<td>241</td>
<td>194</td>
<td>762</td>
<td>261</td>
<td>1,458</td>
</tr>
</tbody>
</table>

Total               | 3,935| 5,349| 2,654| 3,457| 947  | 16,342|

Percent distribution | 24 % | 33 % | 16 % | 21 % | 6 %  | 100 % |

1  Classifications are based on rental rates, location, and amenities offered.  
2  Includes apartments, guest houses, bungalows, and other miscellaneous facilities available for transient rental.

Source: Fideicomiso Acapulco, and Harrison Price Company.
Table 20

OCCUPANCY RATES OF ACAPULCO HOTELS
1
1975 - 1977

<table>
<thead>
<tr>
<th>Month</th>
<th>1975</th>
<th>1976</th>
<th>1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>74.2%</td>
<td>70.0%</td>
<td>79.5%</td>
</tr>
<tr>
<td>February</td>
<td>87.6%</td>
<td>87.2%</td>
<td>93.0%</td>
</tr>
<tr>
<td>March</td>
<td>81.9%</td>
<td>73.0%</td>
<td>83.5%</td>
</tr>
<tr>
<td>April</td>
<td>60.3%</td>
<td>66.6%</td>
<td>72.0%</td>
</tr>
<tr>
<td>May</td>
<td>60.0%</td>
<td>53.8%</td>
<td>59.4%</td>
</tr>
<tr>
<td>June</td>
<td>39.0%</td>
<td>40.6%</td>
<td>48.7%</td>
</tr>
<tr>
<td>July</td>
<td>59.8%</td>
<td>52.1%</td>
<td>75.1%</td>
</tr>
<tr>
<td>August</td>
<td>71.6%</td>
<td>64.3%</td>
<td>80.1%</td>
</tr>
<tr>
<td>September</td>
<td>46.2%</td>
<td>41.2%</td>
<td>52.6%</td>
</tr>
<tr>
<td>October</td>
<td>54.6%</td>
<td>45.7%</td>
<td>53.2%</td>
</tr>
<tr>
<td>November</td>
<td>71.8%</td>
<td>58.9%</td>
<td>65.2%</td>
</tr>
<tr>
<td>December</td>
<td>73.7%</td>
<td>71.7%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Annual Average</td>
<td>65.1%</td>
<td>60.4%</td>
<td>70.1%</td>
</tr>
</tbody>
</table>

---

1 Hotels classed as "AA" or "A" facilities only.

interesting to note the improvement of July and August 1977 occupancy over comparable periods in 1974 and 1975. Acapulco tourist authorities report a similar occurrence in 1978 and state that the rise in summer business is due to the appearance of a true family vacation trade, something Acapulco has not traditionally served, as witnessed by the large inventory of nightclubs, discos, and other late-evening entertainment facilities not appropriate for children. If this trend continues, the tourist market in Acapulco may become increasingly responsive to family-oriented entertainment opportunities, such as the proposed attraction.

A final characteristic of Acapulco tourism important to this analysis is length of stay, which currently averages some 4.8 days. A duration of this magnitude indicates that the area is not incidentally visited as part of a tour of Mexico, but instead attracts a large number of destination tourists, many of whom may be presumed to be destined only to Acapulco. This factor is significant in that it lengthens the amount of time that the proposed attraction would be exposed to visitors and thereby enhances attendance potential.

There are a number of factors affecting the future of tourism to Acapulco. First, the prime beach sites ringing Acapulco Bay are now nearly saturated with hotels, and future development activity in this area will be primarily limited to replacement of older facilities, thus inhibiting the pace of accommodations expansion. Second, there is the diversionary impact of the major new resort areas being developed in Mexico—Cancun on the Gulf and, especially, the previously noted Ixtapa project. A third factor is the cycle inherent in resort development in general. In the early stages of a resort area, rates of growth are extremely rapid as the area is "discovered" by more and more people. Later, when the area matures and becomes firmly established as a destination, visitation tends to increase at a continually decreasing rate as newer and more glamorous destinations appear and people seek new experiences rather than returning again and again to the same place. Eventually, visitation stabilizes, and growth in tourist volume takes place at only modest rates.

For the period under study, HPC estimates that future growth in visitation to Guerrero will approximate the rate of 150,000 persons annually during the
early 1980s, or somewhat below the recent rate, and then further slow to 100,000 persons annually thereafter. During the initial planning year (1981) for the proposed attraction, therefore, total visitation would amount to some 3.1 million people. Allowing for stabilization of visitor levels at Taxco and rather rapid growth at Zihuatanejo, Acapulco's share of this projected 1981 volume is estimated at about 84 percent, or 2.6 million people. Corresponding figures for 1986 and 1990 are 3 million and 3.2 million visitors, respectively, as Acapulco's share continues to decline. The latter figures should be approximately equally divided between foreign and domestic tourists in accordance with the historical pattern. It could be argued that the foreign component will decrease in share over the planning period as foreigners are diverted to newer resort sites and strong growth continues in domestic travel activity. A mitigating influence, however, is the emergence of mass tourism in Acapulco--the family vacation trade--which is a numerically enormous market. Thus, while the luxury market may be moving on to other destinations, the gap is being filled by another type of visitor, thereby helping to maintain the domestic/foreign mix. The mass market phenomenon is really too new in Acapulco to enable a confident judgment on this issue, but in the absence of compelling evidence to the contrary, this analysis will assume continuation of the status quo.

**Aggregate Market Available**

Table 21 summarizes the market support guidelines described in previous paragraphs. A combined market of approximately 3.3 million persons will be available in the initial year, rising to about 4.3 million at the end of the 10-year planning period. The degree to which the proposed attraction will penetrate this sizable and qualitatively suitable market will be addressed in a later section of this report.
Table 21

AGGREGATE MARKET AVAILABLE
TO THE PROPOSED ATTRACTION
1981 - 1990

<table>
<thead>
<tr>
<th></th>
<th>Total Market Size (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1981</td>
</tr>
<tr>
<td><strong>Resident Market</strong></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>590</td>
</tr>
<tr>
<td>Secondary</td>
<td>145</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>735</td>
</tr>
<tr>
<td><strong>Tourist Market</strong></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>1,300</td>
</tr>
<tr>
<td>Foreign</td>
<td>1,300</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2,600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3,335</td>
</tr>
</tbody>
</table>

Source: Harrison Price Company
Section 4
CONCEPT EVALUATION AND DEVELOPMENT BUDGET

As originally proposed, one of the major objectives of this research program was to develop a conceptual framework for the proposed Acapulco aquarium that would maximize market and financial performance. However, as stated in the introduction to this report, it became apparent after study inception that severe time constraints existed on project implementation (the attraction must be in operation no later than January of 1981), with the result that much of the basic design and planning work was completed by the client group on a highly accelerated schedule. This section of the report reviews the client plan, including refinements and modifications introduced by management personnel of Sea World, Inc. (particularly William Dreiss), who were independently retained as technical consultants. It must be cautioned that the development program as described herein is subject to change as the content of the project continues to evolve, and certain of the envisioned components may ultimately be rejected or replaced. What follows is thus a statement of the concept as of this point in time, along with a preliminary estimate of the associated development budget. To establish a perspective for this statement of concept, an introductory discussion is made of marine life parks in general, and operating characteristics for selected attractions of this type are reviewed.

THE MARINE LIFE ATTRACTION

Over the past 20 years, a marked upgrading has taken place in the quality of commercial recreation demanded by and offered to the public. Conventional amusement parks of past eras have been replaced by themed amusement attractions, of which Disneyland was the conspicuous original and now perennial model. This concern for quality in recreation has pervaded all forms of mass entertainment, including the marine life attraction. The traditional city-sponsored aquarium was little more than an exhibit of fish—educational, but entertaining only in a passive, rather monotonous fashion. Such facilities are vastly different from today's "aquatic theme park," as exemplified by Sea World in San Diego, Florida, and Ohio, Marineland, and a host of smaller
attractions which capitalize on the inherent crowd appeal of performing marine mammals, huge tanks displaying sea life in a natural-appearing environment, and pools where visitors can actually touch and feed aquatic animals. The visitor’s enjoyment is further enhanced by the provision of a variety of eating and shopping opportunities within the park complex. Recognizing the popularity of the new-style marine attraction, many cities around the world have redeveloped their outmoded aquariums to incorporate selected marine park features to the extent possible within the limits of physical and financial resources.

The result of the differences between conventional aquariums and modern marine attractions is the much greater impact of the latter on nearby markets as well as the drawing of large numbers of people from more distant markets, including tourists. Visitors tend to plan trips to such attractions well in advance and expect to spend a major part of the day at the site. Adults enjoy the activities as much as children because they can participate in a far broader and more satisfying experience than the unimaginative exhibit of fish in wall-mounted tanks. The broader scope in turn increases visitor length of stay, and hence per capita spending, since a direct relationship exists between the time visitors remain on-site and the amount of money they expend for food, souvenirs, and the like. With these basic principles in mind, it will be useful to review the general operating characteristics of leading marine life attractions.

Operating Characteristics of Marine Life Parks

In Table 22, selected operating data are presented for major aquarium attractions in the United States. Six of the facilities shown are privately owned and operated on a commercial basis, while four are owned by public entities or nonprofit foundations. The data illustrate several important differences between the two types of facilities: the commercial operations are typically much larger, charge substantially higher admission prices, and for the most part, entail much greater operating budgets. The four public operations listed are among the best and most heavily attended in the country, yet it is interesting to note that the attendance volume of the high-priced commercial facilities usually exceeds that of the public operations. Clearly, the
Table 22
OPERATING CHARACTERISTICS OF SELECTED AQUARIUM ATTRACTIONS
1977 - 1978

<table>
<thead>
<tr>
<th>Aquarium</th>
<th>Size (hectares)</th>
<th>Number of Parking Spaces</th>
<th>Total Annual Attendance (thousands)</th>
<th>Admission Prices (pesos)</th>
<th>Annual Operating Budget (thousands of pesos)</th>
<th>Operating Budget per Attendee (pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanna Barbera Marine-land</td>
<td>36.4</td>
<td>2,500</td>
<td>663</td>
<td>134</td>
<td>89</td>
<td>Under 4</td>
</tr>
<tr>
<td>(Los Angeles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marineland of Florida (St.</td>
<td>22.3</td>
<td>600</td>
<td>600</td>
<td>79</td>
<td>39</td>
<td>Under 7</td>
</tr>
<tr>
<td>Augustine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine World/Africa USA (San</td>
<td>26.7</td>
<td>1,500</td>
<td>850</td>
<td>156</td>
<td>89</td>
<td>Under 12</td>
</tr>
<tr>
<td>Francisco)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea Life Park</td>
<td>5.3</td>
<td>200</td>
<td>550</td>
<td>89</td>
<td>51</td>
<td>Under 7</td>
</tr>
<tr>
<td>(Honolulu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea World (San Diego)</td>
<td>34.4</td>
<td>3,800</td>
<td>2,276</td>
<td>146</td>
<td>89</td>
<td>Under 4</td>
</tr>
<tr>
<td>Sea World (Orlando)</td>
<td>50.6</td>
<td>4,000</td>
<td>2,300</td>
<td>152</td>
<td>107</td>
<td>Under 4</td>
</tr>
<tr>
<td>Public or Quasi-Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Aquarium (Boston)</td>
<td>2.0</td>
<td>90</td>
<td>820</td>
<td>79</td>
<td>45</td>
<td>49,500</td>
</tr>
<tr>
<td>New York Aquarium (New York)</td>
<td>6.1</td>
<td>700</td>
<td>500</td>
<td>45</td>
<td>17</td>
<td>22,500</td>
</tr>
<tr>
<td>Seattle Aquarium (Seattle)</td>
<td>na</td>
<td>na</td>
<td>550</td>
<td>56</td>
<td>28</td>
<td>22,590</td>
</tr>
<tr>
<td>Shedd Aquarium (Chicago)</td>
<td>na</td>
<td>2,000</td>
<td>1,067</td>
<td>34</td>
<td>11</td>
<td>42,390</td>
</tr>
</tbody>
</table>

na means not available.
1 Age limit for free admission.

Source: American Association of Zoological Parks and Aquariums, 1977-78 Directory of Zoos and Aquariums; and Harrison Price Company.
commercial attractions are satisfying a demand in the marketplace that cannot be met by traditional aquariums.

Part of the reason for the greater appeal of modern marine life parks relates to the variety and concentration of the animal inventory. Table 23 illustrates the substantial differences which exist not only between the public and private groups as a whole, but between individual attractions within each group. As indicated, the commercial facilities tend to have a comparatively large inventory of marine mammals (whales, dolphins, and seals), along with an extensive collection of birds and reptiles. The public aquariums, on the other hand, heavily emphasize fish and invertebrates (the animals of the tide pool and coral reef) owing to limited space available for larger species. The three most prominent of the parks shown—the Sea World facilities and Hanna Barbera Marineland—contain the highest proportion of mammals, these animals being the "stars" of the immensely popular shows at these attractions.

Description of Selected Facilities

As a means of identifying certain specific features that have contributed to the success of today's marine life attractions, the following paragraphs briefly highlight the scope and content of selected existing facilities.

Sea World

The premier marine life parks of today's recreation industry are the Sea World attractions in California, Florida, and Ohio. The California park was the first to be developed, originally on a nine-hectare site on Mission Bay in San Diego at an investment of $6 million (MN 135 million). The facility has continually expanded over the years and now occupies some 34 hectares, with the cumulative investment amounting to several times the original sum. In 1970, the $10 million (MN 225 million) Ohio facility was opened on a 36-hectare site near Cleveland, while 1973 was the opening date of the 51-hectare $23 million (MN 518 million) Florida park in Orlando. The California and Florida attractions are open daily year-round, while the Ohio park operates on a spring-to-fall schedule of approximately 110 days. The adult admission price is slightly higher in Orlando at $6.75 (MN 152) than the other two locations, with $6.50 (MN 146). Parking is free at all three sites.
<table>
<thead>
<tr>
<th>Aquarium</th>
<th>Number of Species Represented</th>
<th>Number of Individual Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mammals</td>
<td>Birds</td>
</tr>
<tr>
<td>Private Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanna Barbera Marineland</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Marineland of Florida</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Marine World/Africa USA</td>
<td>9^1</td>
<td>17</td>
</tr>
<tr>
<td>Sea Life Park</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Sea World (San Diego)</td>
<td>15</td>
<td>192</td>
</tr>
<tr>
<td>Sea World (Orlando)</td>
<td>13</td>
<td>97</td>
</tr>
<tr>
<td>Public or Quasi-Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Aquarium</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>New York Aquarium</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Seattle Aquarium</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Shedd Aquarium</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

1 Excludes land mammals in the Africa USA section of the park.

The Sea World parks all utilize the same basic thematic format and entertainment content, but are not identical; each has several unique features. Common to all the parks are several outdoor marine stadiums used for dolphin and whale shows, each stadium seating up to 3,500 people; a variety of imaginatively designed fresh and saltwater aquarium exhibits; and beautifully landscaped grounds, with free-roaming birds. Additional attractions at the San Diego park include a Japanese village featuring pearl-diving exhibitions, aerial tram and hovercraft rides, a 90-meter observation tower, and a 0.4-hectare themed children's playground. Among recent additions to the park are a 1.9-million-liter shark tank and a mammal feeding pool stocked with dolphins and whales. The Florida park also has an observation tower and a new shark tank, and currently under development is the "Florida Festival" area, containing 5,400 square meters of food and merchandise space offering a variety of international specialties in a bazaar-type configuration. The leading attractions at the Ohio Sea World are water ski shows and a birds-of-prey show.

Attendance volume at Sea World in San Diego has grown from 415,000 in its initial year of operation to some 2.6 million in 1978. The Florida park recorded 1.6 million visitors in its first full year, and now reports about 2.4 million. Little variation has been experienced at the Ohio site, where first-year attendance amounted to approximately 944,000 and now totals 1.3 million. The California and Ohio parks are largely supported by their respective resident markets (generally speaking a 350-kilometer radius), which provide some 55 to 60 percent of total attendance. The Florida attraction, in contrast, is heavily dependent on tourists, with some 85 percent of total attendance generated by out-of-state visitors. Reflecting the extensive entertainment content of the Sea World parks, average length of stay at all facilities ranges from 4.5 to 5.0 hours, and per capita spending is reported in the $9 to $10 range (MN 200 to 225).

Hanna Barbera Marineland

The oldest of the modern aquatic attractions is Marineland, located on Los Angeles' Palos Verdes Peninsula, which opened in 1953. This year-round facility occupies approximately 36 hectares and has an adult admission price
of $5.95 (MN 134). The history of this facility has not been one of unqualifed success, at least not in recent years. Among the park's chief problems is its location. While the Palos Verdes site is outstanding from an aesthetic standpoint, it lacks expansion potential and is in addition far removed from the nearest freeway and can only be reached along a winding secondary arterial, factors which have combined to create a serious competitive disadvantage. The inability to compete successfully is reflected in Marineland's attendance history, where a peak of about 1.5 million persons was reached in the early 1960s, and has consistently declined ever since. Total 1978 attendance amounted to 663,000.

Owing to its poor performance, the park has undergone several changes of ownership, the latest one in late 1977, when it was purchased by Taft Broadcasting for a reported $5 million (MN 112.5 million). The new owners have spent some $3 million (MN 67.5 million) on additions and improvements, including a new 2,000-seat outdoor arena, two musical variety stage shows, a new animal show, redeveloped landscaping and concessions, and the Baja Reef. The latter is a highly unique attraction that opened just a few months ago. It is comprised of a 1.1-million-liter swim-through saltwater aquarium stocked with 2,500 specimens, including sharks, sting rays, and sea turtles in addition to a multitude of colorful fish. Depth of the tank ranges from one to four meters. Guests are outfitted with wet suits, face masks, snorkels, and fins at a charge of $2 (MN 45) and allowed to explore the 72-meter long U-shaped reef designed to simulate the Baja California coast from Ensenada to Cabo San Lucas. Swimmers are under the supervision of trained lifeguards, and the swim takes approximately 10 minutes. The park provides showers and dressing rooms for those who swim, but the aquarium can also be viewed through windows along the sides of the tank.

The capital improvements made by the park's new owners produced a substantial increase in attendance in 1978 over 1977, and it is hoped that the addition of the Baja Reef will result in further attendance gains. Average visitor length of stay at Marineland is currently estimated at 3.5 hours, and this is another area where an increase is desired in order to raise per capita spending levels, now averaging about $8 (MN 180).
New England Aquarium

Among the best of the more traditional types of marine attractions is the New England Aquarium, which opened in 1969 at an original cost of roughly $6 million (MN 135 million). It is located on the Central Wharf of Boston's Inner Harbor and has a total area of about two hectares. All exhibit facilities are contained in a single concrete structure, the central feature of which is a large circular tank containing a variety of saltwater fish, which sits in a large rectangular tray containing yet other fish. The entire tank complex is four stories high and may be viewed from a number of windows along a spiral ramp which encircles the tank from bottom to top. At each successive level, corridors lead away from the tank to galleries lined with small wall tanks.

Reflecting its non-commercial nature, the New England Aquarium offers few visitor facilities and no shows. Its outstanding central aquarium, however, has demonstrated a high degree of drawing power, with current attendance volume estimated at some 820,000 persons. The adult admission price is $3.50 (MN 79), and the facility is open year-round.

New York Aquarium

Another large public facility is the New York Aquarium, which was relocated to its present six-hectare site on Brooklyn's Coney Island in 1956. The complex consists of a main exhibit building surrounded by a number of satellite exhibits developed under expansion programs over the years. The main building has some two dozen wall tanks, while an adjacent building has a 418,000-liter whale pool. The latter attraction may be viewed from a variety of angles, including both subsurface and from above. Outdoor tanks and pools are also provided, housing dolphins, sharks, penguins, and seals, and dolphin shows are held when weather permits. There is also a large tidepool at the New York Aquarium, where visitors may handle a variety of invertebrate marine life.

Visitor facilities at this attraction include a cafeteria, gift shops, and outdoor picnic area open during the summer. The admission price is $2.00 (MN 45) for adults, and current attendance volume amounts to approximately 500,000 people.
ENVISIONED CONCEPT AND SCOPE
OF THE ACAPULCO ATTRACTION

In light of the foregoing review of marine life attractions in general, and
the specific content of successful existing facilities, the remainder of
this section of the report will address the development plan envisioned for
Acapulco. The physical and conceptual components of the plan will first be
examined, followed by a preliminary estimate of capital costs.

Underlying Philosophy of Development

The subject site has been made available for development by the Guerrero
state government, which will also contribute all or most of the capital in-
vestment required to implement the proposed project. Motivated by the de-
sire to create a high-quality recreation opportunity for local residents and
increase residual benefits from tourism, the state's desire is to provide a
"showcase" attraction serving both markets. Among various options as to the
nature of the facility, an aquarium was selected as the focal point because:
(1) there is no first-rate aquarium attraction anywhere in Mexico at the
present time, thus making the project unique; and (2) Acapulco's oceanfront
setting and long association with sportfishing and scuba diving offers an
ideal environment for a marine-oriented facility. The disparity in income
and thus discretionary spending power of the resident and tourist populations,
however, necessitates an unusual approach to development. It has been noted
that modern marine attractions are expensive to build and operate and there-
fore require relatively high admission charges, charges which would exceed
the financial resources of most Acapulco residents. On the other hand, the
government does not wish to subsidize the operation beyond the commitment
for the initial investment, instead preferring that the complex be designed
to attain a break-even position.

The proposed solution to the challenge of ensuring economic viability while
meeting the needs of the public is, in essence, to divide the attraction into
two sections of more or less equal magnitude: a public park and entertain-
ment area requiring only a token admission fee, and a private section con-
taining the aquarium and various specialty shopping/dining/entertainment
nodes requiring a "normal" admission charge. The two sections of the park
would be closely integrated by means of the landscaping theme and overall thematic treatment, but would function separately from an operational standpoint, visitors having the option of utilizing either one or both sections. By definition, the public section would draw primarily on the resident market and the private section on the tourist market, particularly the foreign segment. Through this arrangement, it is hoped that revenues from the aquarium section will support the public section and perhaps additionally generate profits which would accrue to participating private entities, such as concessionaires and sponsors. The state government or agency thereof would be the owner of the attraction and provide overall administrative supervision, but would contract for actual on-site management, ideally with an organization having proven experience with this type of facility.

**Thematic Format**

In recreation development, theming is the means by which visitors are transported from the mundane responsibilities of everyday existence into a special world of pleasure and excitement. It is, moreover, an indispensable way of unifying the separate and often widely different elements of an attraction complex. The guiding principles in selecting a theme should be color, festiveness, and flexibility. With respect to the latter, it is important to consider that a theme should not be so narrow that it becomes repetitious, nor so broad that it becomes imperceptible. The central objective is to choose an overall theme of breadth sufficient to encompass and allow for the successful articulation of a number of sub-themes. Architectural styles, employee costumes, musical presentations, exhibits and shows, decorative accessories—in short, all components of the complex—are designed to carry out some aspect of the "umbrella" theme. As a result, a major portion of capital investment is usually allocated to those special features that help tell the story or create the intended environment.

The general theme selected for the proposed attraction is the cultural heritage of the Pacific Rim—the many nations and peoples that occupy the shores of the Pacific Ocean from South America to Alaska, and from Australia to Russia. The theme also has a dimension in time, ranging from ancient to modern, and sub-themes include the specific cultures within the Pacific Rim zone.
Both geographically and socially, this theme covers an extremely broad area and must be reduced in scope to ensure a sensitive presentation. The focus will therefore be on those nations and peoples which have had the closest traditional ties with Mexico, such as neighboring Latin America, the Philippines, China, Japan, and Polynesia. The outstanding natural amenities of the subject site further dictate that theming be treated in a light-handed unpretentious manner, avoiding design elements that threaten to overwhelm the physical environment.

Physical and Entertainment Content

The major physical facilities and activities of the park are described in subsequent paragraphs. Excluded from this discussion are the technical specifications of the various facilities (size and depth of pools, water filtration system requirements, and other engineering inputs) which were in preparation during June with consulting assistance from William Dreiss of Sea World.

Entrance Complex

The main entrance to the proposed attraction will be on the north side of the site from Avenida Cuauhtemoc. Parking lots will flank the entrance plaza which will contain separate ticket booths and turnstiles allowing entry/exit to the two sections of the complex (the private section being on the east side of the property and the public section on the west), information booth, public telephones, rental office (for strollers, wheelchairs, and cameras), a modest amount of merchandise sales space, a snack bar, restroom facilities, and a games/arcade area featuring a variety of games of skill and chance for which novelty prizes may be won.

Public Park Section

The basic content of the public side of the complex will be informal recreation facilities requiring comparatively limited capital outlays. Included will be a large picnic area, a nature walk, a children's playground and petting zoo, and a variety of snack stands. A casual restaurant is also planned, probably offering inexpensive seafood or local specialties in a Mexico-themed structure. Two major show facilities would be located in this section.
as well—a 1,000-seat amphitheater for folkloric presentations and other formal productions, and a 900-square-meter cultural plaza for more casual entertainment programs, such as musical ensembles, bird shows, puppet shows, and so on, scheduled on an intermittent basis throughout the day. Entrance to the latter facility will be open to all visitors within the basic nominal admission fee, while a separate ticket purchase will be required for the amphitheater productions. The amphitheater, furthermore, will be the only component of the public section remaining open at night, all other facilities to be closed at dusk.

The entire public area will be lushly landscaped, criss-crossed by streams, and dotted with small pools and waterfalls. A larger pool will house a replica of a Chinese junk, which visitors may board and explore. Access to the beach will be available from the public section (as well as from the private section) via an overhead pedestrian promenade across the Costera. Some type of control will be established at the beach access point to prevent unauthorized entry to the park from the beach. The major facility in the beach area will be a restaurant located on the rock outcropping extending into Acapulco Bay.

Aquarium Section

Most of the capital required for the proposed attraction will be expended in the creation of the aquarium complex. This side of the park will contain two outdoor marine stadiums of about 500 seats each, one for seal and sea lion shows, and one for dolphin shows. Other outdoor facilities include an aquatic reptile exhibit (snakes, alligators, iguanas, and turtles), two free-form tide pools for invertebrates, and dolphin and seal/otter feeding pools. The major indoor structure will be a large aquarium exhibit comprised of a 200,000-liter California Reef tank, a free-standing "community" tank of approximately 28,000 liters, and some 14 "jewel" (or wall-mounted) tanks ranging from 1,600 to 3,200 liters in capacity. All of the principal marine exhibits will incorporate graphic displays describing the characteristics and significance of the various specimens presented. All marine attractions will operate during daylight hours only, with shows scheduled regularly throughout the day.
Among non-marine attractions in the aquarium section will be a themed children's playground styled after Sea World's highly appealing "Kap'n Kidd's World," a 90-meter double-deck observation tower housing a revolving restaurant and bar, mini-stadiums for specialty entertainment acts (such as bird and musical shows), a Japanese Village (containing a teahouse, cocktail lounge and restaurant, gift shops, and a snack stand), a beer and wine garden, a variety of snack stands, and a dining/shopping/entertainment center located on the top of the hillock at the northeast corner of the site. The latter hilltop complex will contain a themed restaurant, bar, snack stand, gift shop, and possibly some performing crafts exhibits (glass blower, wood carver, and the like). All major restaurant facilities will remain open at night and will present live entertainment programs. As in the public area, the aquarium section will be heavily landscaped and provided with a number of water-amenity features. There will also be many free-roaming birds on the grounds to add color and visitor interest and perhaps some formal bird exhibits.

An aerial tramway system will enable an alternative mode of access to various points within the aquarium section of the park, with stations planned at the hilltop center, at some central location in the aquarium area, and at the beach restaurant. The tramway and the observation tower will both require a charge in addition to the basic admission price. Components envisioned for future implementation within the aquarium section are a large indoor-outdoor shark tank adjoining the main aquarium, a Polynesian Village, expansion of the seating capacity of the dolphin and seal stadiums, and addition of a pearl-diving exhibition in the Japanese Village.

Estimated Capital Investment Requirements

The estimated cost of developing the facilities described in the foregoing paragraphs, along with required support facilities and general site development expenses, is presented in Table 24. Costs are expressed both in US dollars and in local currency, with the latter sums reduced by an across-the-board factor of 20 percent. This is the reported differential between prevailing US costs and costs in Mexico, where potential savings may be realized in labor and certain materials. Estimates were developed jointly by
**Table 24**

PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS
FOR THE PROPOSED AQUARIUM ATTRACTION
(Thousands)

<table>
<thead>
<tr>
<th>Component</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance Complex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor Service Facilities</td>
<td>400</td>
<td>7,200</td>
</tr>
<tr>
<td>Games/Arcade Facility</td>
<td>500</td>
<td>900</td>
</tr>
<tr>
<td>Subtotal</td>
<td>450</td>
<td>8,100</td>
</tr>
<tr>
<td>Public Park Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature Walk</td>
<td>300</td>
<td>5,400</td>
</tr>
<tr>
<td>Picnic Area</td>
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<td>1,800</td>
</tr>
<tr>
<td>Children's Playground</td>
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<td>3,600</td>
</tr>
<tr>
<td>Petting Zoo</td>
<td>75</td>
<td>1,350</td>
</tr>
<tr>
<td>Amphitheater (1,000 seats @ $300)</td>
<td>300</td>
<td>5,400</td>
</tr>
<tr>
<td>Cultural Plaza (10,000 square feet @ $60)</td>
<td>600</td>
<td>10,800</td>
</tr>
<tr>
<td>Chinese Junk</td>
<td>300</td>
<td>5,400</td>
</tr>
<tr>
<td>Snack Stands ($ at $30,000)</td>
<td>150</td>
<td>2,700</td>
</tr>
<tr>
<td>Restaurant</td>
<td>600</td>
<td>10,800</td>
</tr>
<tr>
<td>Subtotal</td>
<td>2,625</td>
<td>47,250</td>
</tr>
<tr>
<td>Aquarium Section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seal Arena</td>
<td>1,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Dolphin Arena</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Aquarium - California Reef Tanks</td>
<td>200</td>
<td>3,600</td>
</tr>
<tr>
<td>Community Tank</td>
<td>300</td>
<td>5,400</td>
</tr>
<tr>
<td>Jewel Tanks (14 at $15,000)</td>
<td>210</td>
<td>3,780</td>
</tr>
<tr>
<td>Aquatic Reptile Exhibit</td>
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<td>2,700</td>
</tr>
<tr>
<td>Tide Pools</td>
<td>250</td>
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</tr>
<tr>
<td>Seal/Diver Feeding Pool</td>
<td>600</td>
<td>10,800</td>
</tr>
<tr>
<td>Dolphin Feeding Pool</td>
<td>600</td>
<td>10,800</td>
</tr>
<tr>
<td>Themed Children's Playground</td>
<td>800</td>
<td>14,400</td>
</tr>
<tr>
<td>Mini-Stadium</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Japanese Village</td>
<td>1,200</td>
<td>21,600</td>
</tr>
<tr>
<td>Hilltop Complex</td>
<td>775</td>
<td>13,950</td>
</tr>
<tr>
<td>Beer-Vine Garden</td>
<td>800</td>
<td>14,400</td>
</tr>
<tr>
<td>Snack Stands (2 at $30,000)</td>
<td>60</td>
<td>1,080</td>
</tr>
<tr>
<td>Observation Tower</td>
<td>3,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Aerial Tramway</td>
<td>1,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,945</td>
<td>233,010</td>
</tr>
<tr>
<td>Beach Restaurant</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Support Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration and Maintenance Facilities</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Storage</td>
<td>200</td>
<td>3,600</td>
</tr>
<tr>
<td>Animal Clinic and Nursery</td>
<td>100</td>
<td>1,800</td>
</tr>
<tr>
<td>Animal Food Preparation Facility</td>
<td>100</td>
<td>1,800</td>
</tr>
<tr>
<td>Animal Holding Tanks</td>
<td>300</td>
<td>5,400</td>
</tr>
<tr>
<td>Avian Facility</td>
<td>150</td>
<td>2,700</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,350</td>
<td>24,300</td>
</tr>
<tr>
<td>General Site Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping (20 hectares @ $75,000)</td>
<td>1,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Parking (4 acres @ $20,000)</td>
<td>80</td>
<td>1,440</td>
</tr>
<tr>
<td>Perimeter Fencing (6,000 feet @ $15)</td>
<td>90</td>
<td>1,350</td>
</tr>
<tr>
<td>Grading (200,000 cubic yards @ $1.50)</td>
<td>300</td>
<td>4,500</td>
</tr>
<tr>
<td>Roadways, Walkways (160,000 feet @ $0.80)</td>
<td>130</td>
<td>2,080</td>
</tr>
<tr>
<td>Pond and Street Construction</td>
<td>100</td>
<td>1,800</td>
</tr>
<tr>
<td>Signage</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Sound and Lighting Systems</td>
<td>500</td>
<td>9,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>1,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Sewage Treatment Plant</td>
<td>150</td>
<td>2,700</td>
</tr>
<tr>
<td>Subtotal</td>
<td>5,050</td>
<td>90,900</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22,990</td>
<td>412,560</td>
</tr>
<tr>
<td>Contingency (at 5 percent)</td>
<td>1,146</td>
<td>20,628</td>
</tr>
<tr>
<td>Pre-Opening Expenses (at 5 percent)</td>
<td>1,146</td>
<td>20,628</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>25,212</td>
<td>433,186</td>
</tr>
</tbody>
</table>

1 In constant 1979 dollars.
2 US dollar amounts were converted to Mexican pesos at the rate of MXN 22.5 = US $1 and reduced across the board by a factor of 20 percent to reflect potential cost savings in Mexico.

Source: Sea World, Inc., and Harrison Price Company.
Sea World technical consultants and HPC and are preliminary in nature only, pending completion of more detailed project plans. As indicated, the aggregate total development costs for the project are estimated at approximately $23 million (MN 413 million). The percentage breakdown of these expenses by major component is as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent of Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance Complex</td>
<td>2 %</td>
</tr>
<tr>
<td>Public Park Section</td>
<td>11</td>
</tr>
<tr>
<td>Aquarium Section</td>
<td>57</td>
</tr>
<tr>
<td>Beach Restaurant</td>
<td>2</td>
</tr>
<tr>
<td>Support Facilities</td>
<td>6</td>
</tr>
<tr>
<td>General Site Development</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

By far the largest proportion of capital investment, some $12.9 million (MN 233 million), or 57 percent of the total, will be incurred in developing the aquarium section of the park. About $2.6 million (MN 47.3 million) will be entailed in developing the public park facilities, representing 11 percent of the total, while the entrance complex will require $450,000 (MN 8.1 million) or 2 percent of the total. Another 2 percent of total development expense, or $500,000 (MN 9 million), is allocated for the beach restaurant. The combined cost of all basic entertainment facilities thus comes to $16.5 million (MN 297.4 million), to which has been added some $1.4 million (MN 24.3 million) for support facilities and roughly $5.1 million (MN 90.9 million) for general site development. The major cost elements in the latter category are $1.5 million for landscaping (MN 27 million) and a similar allocation for utility systems. A 5-percent contingency, or $1.1 million (MN 20.6 million), has been added to cover miscellaneous expense items and provide for variation in the above estimates, and an additional 5-percent allowance is included for pre-opening expenses (primarily comprised of administrative staff salaries during the implementation period and advertising and marketing costs). No allowance has been made for architectural and engineering expenses, since these services are being rendered independently by the client group and do not form a part of the attraction budget.
HPC understands that the Guerrero state government has made a maximum of $16 million (MN 360 million) available for development of the proposed attraction. It can be seen that estimated costs for basic facilities exceed this limit by about $7 million (MN 53 million); however, several opportunities are reported to exist for private funding of selected components. Interest in the rather costly observation tower, for example, has been expressed by the Banco Comercio, Mexico's largest private banking institution. The aerial tramway is another major cost component that may be attractive to a private sponsor, along with selected other facilities. To develop the proposed attraction exactly as described in this report would require approximately $9 million (MN 94 million) of private funding over and above the government commitment after including prorated contingency and pre-opening expenses. This does not appear to be an unrealistic goal given the wide exposure and recognition the park is likely to achieve by virtue of its quality and uniqueness, and substantial advertising value should be realized by any participating sponsors. If private funding of selected components cannot be obtained, the content of the proposed attraction would have to be reduced to conform with the state government budget. This will, in turn, reduce the scope and market impact of the attraction, and result in lower revenue-generation potential. HPC therefore strongly recommends that private sponsors be aggressively pursued; otherwise, the attraction may fall short of the "critical mass" necessary for optimum financial performance.
Section 5
ATTENDANCE ANALYSIS AND PHYSICAL PLANNING GUIDELINES

Examined in this section of the report are expected market penetration and attendance levels at the subject attraction based on the experience of comparable facilities, the previous analysis of the site and market environment, and the envisioned scope and content of the project. This examination will provide the foundation for physical planning guidelines and a preliminary estimate of operating labor required.

ESTIMATED MARKET PENETRATION AND ATTENDANCE

In determining the degree of market penetration that can be realistically achieved by the subject attraction, the experience of comparable facilities and the extent of competition from existing attractions must be taken into account.

Experience of Comparable Facilities

No major themed attractions of the size, complexity, and investment level of American leisure facilities have as yet been constructed in Mexico. Consequently, there are no local comparables whose experience would be relevant to the present analysis. An additional complication exists in this instance because of the dual nature of the proposed facility, with the two sections of the park oriented to different markets and different recreational needs, admission price being the pivotal factor. The impact of pricing will largely be confined to the resident market; tourist propensity to attend may be relatively unaffected because of the nature of the public facilities to be provided, which are not for the most part geared to attracting tourist support, and the presence or absence of an admission charge is more or less immaterial. Tourists will instead be primarily interested in the major entertainment components—the aquarium, the shows, and the shopping/dining aspects of the project. Penetration of the tourist market thus is not especially price-sensitive, but rather rests on the scope and quality of the entertainment offering. In approaching the determination of attendance potential, therefore, it is necessary to address the proposed facility as if it were two
separate attractions—a nominal-priced public park appealing mainly to local residents and a higher-priced commercial entertainment facility appealing primarily to tourists.

A review of the market penetration performance of leading parks in the United States will offer a general perspective on the attendance potential of the two parts of the subject attraction. Regarding the aquarium section, the relationship between attendance volume and total capital investment is fairly well established in the US recreation industry. Simply put, the bigger and more expensive the park, the greater the impact. There are, of course, exceptions, particularly in market environments that are "captive" in nature or undersupplied with high-quality recreation facilities. A case in point is Hawaii, where a largely captive market situation generates high attendance levels with comparatively modest investments. In accordance with the general correlation between investment and market impact, however, the text table below shows market penetration rates recorded by major attractions in the US whose investment parameters and entertainment content are similar to that proposed for Acapulco:

<table>
<thead>
<tr>
<th>Resident Market</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>30 %</td>
<td>25 %</td>
<td>20 %</td>
<td>11 %</td>
</tr>
<tr>
<td>Secondary</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tourist Market</td>
<td>15</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

As indicated, the range of market penetration extends from 11 to 30 percent in the primary resident segment, 7 to 10 percent in the secondary resident segment, and 5 to 15 percent in the tourist segment. The primary resident market in these examples refers to the area within a one-hour drive and thus is not directly comparable to the Acapulco primary market, where driving times will not exceed 30 minutes. The secondary resident (one to two hours' drive) and tourist market definitions as used above, however, correspond to those for Acapulco.
All of the above parks charge relatively high admission fees and, as previously mentioned, their experience is useful only with reference to the aquarium section of the subject attraction. An identification of the potential range of market capture for the public park facilities is problematical in that there are no other conceptually similar attractions. The closest comparable would be the specialty entertainment center, a menage of shops, restaurants, nightclubs, and cinemas in a themed, beautifully landscaped environment (exemplified by Ports O'Call in Los Angeles, Faneuil Hall in Boston, and Trolley Square in Salt Lake City, among others). At these attractions, which have free admission, market penetration typically reaches 300 to 350 percent among residents living up to 16 kilometers away, 10 to 60 percent within a radius of 80 kilometers, and 2 to 15 percent among tourists (penetration rates in excess of 100 percent reflect repeat visitation, with nearby residents typically coming to the site several times each year).

All of the foregoing penetration rates, as noted, reflect US experience, which is not directly transferrable to the Acapulco market environment. The only local comparable of any relevance to this analysis is the Centro Acapulco (the characteristics of which will be described subsequently), currently the leading nighttime entertainment attraction in Acapulco. Preliminary information obtained from management of the Centro indicates a total annual attendance volume of about 540,000 persons, of whom 80 percent are believed to be tourists. The Centro levies a 30-peso general admission charge and charges separately for individual shows (up to 150 pesos per event). It is thus a rather expensive outing for a local family, which explains the heavy tourist orientation. Implied market penetration rates for the Centro thus amount to 20 percent of the currently available tourist market and 18 percent of the local resident market. The 20-percent capture rate for the tourist market seems somewhat low given the scope and quality of the Centro offerings and the absence of competition, but probably reflects its almost exclusively nighttime orientation (which reduces the period of time that the attraction is exposed to the market). The proposed facility will operate during both day and nighttime hours and should thus be able to improve considerably on the Centro experience, particularly given the drawing power of a first-class aquarium complex.
Inventory of Competitive Facilities

One of the most favorable market conditions for the proposed facility is the virtual lack of significant competition in Acapulco, the Centro being the only other attraction of comparable quality and magnitude. This $35 million (MN 787 million) complex was built a few years ago, originally as a convention center but subsequently expanded into a combination convention/entertainment center of considerable stature. Major facilities of the 14-hectare complex include the Plaza Mexicana featuring continuous live entertainment, three restaurants, two cocktail lounges with informal musical shows, a disco, a nightclub featuring Las Vegas-style shows, a cinema, shops, an 1,800-seat amphitheater for folkloric ballet productions, and a 1,200-seat theater for the performing arts. All of these attractions operate on a sunset-to-dawn schedule throughout the year. The two theater facilities double as convention meeting sites during the day, with other purely convention-oriented facilities including an exhibition hall seating up to 9,000 persons, 4,500 square meters of enclosed exhibit space, six meeting rooms seating between 225 and 450 people, a restaurant and bar (also open to the public), and an assortment of lobbies and lounges. There are 50 covered parking spaces (plus 25 bus spaces) at the Centro and another 250 spaces (plus 18 bus spaces) in an outdoor lot at the rear of the complex. Grounds are nicely landscaped and decorated with pre-columbian artifacts, architecture is striking, and a spectacular row of fountains dominates the entrance promenade.

HPC understands that Centro management is considering the addition of daytime recreation activities. Although information is sketchy, one idea reportedly under consideration is a dolphin pool and a water sports area (water slide and swimming pool). It is not known whether dolphin shows are envisioned. At present, the Centro will compete with the proposed attraction only at night (especially since the evening entertainment offerings of the two facilities will be quite similar), but if the planned daytime complex actually materializes and proves to be of major significance, the competitive strength of the Centro could be substantial, at least for tourist business. Competition for the resident market will probably be minimal unless the present admission price structure is changed to allow wider participation by the local populace. Without more definitive information as to the Centro's plans, it
is difficult to predict the competitive impact of this facility, but a certain degree of conservatism appears warranted in estimating attendance at the subject site.

**Projections for the Proposed Attraction**

Based on HPC's knowledge of operations at the attractions described in preceding paragraphs and a comparison of development content and locational amenities, estimated market penetration rates and attendance for the subject attraction are presented in Table 25. For the public park section, the rate of market capture ranges from 300 to 325 percent in the primary segment over the 10-year planning period and 20 to 25 percent in the secondary segment. Applied to the previously estimated market populations, these rates translate into a resident attendance volume totaling about 1.8 million persons in the initial year to 2.9 million persons in the tenth year. Penetration of the domestic tourist market is forecast at 30 to 35 percent, while that of the foreign tourist market is projected at a constant 10 percent. The resulting total tourist attendance amounts to 520,000 people in 1981 and 720,000 in 1990. Combined attendance from both resident and tourist sources is calculated at 2.3 million to 3.6 million over the planning period. Reflecting the high resident orientation of this section of the park, some 77 to 80 percent of total visitation is expected to be locally generated.

An entirely different pattern of market capture is forecast for the park's aquarium complex. Here, penetration of the primary resident market ranges from 20 to 30 percent, while capture of the secondary market is estimated at a modest 5 percent. On this basis, total resident visitation will range from 125,000 to 275,000 people over the period indicated. Among domestic tourists market penetration estimates are 15 to 25 percent, with foreign tourist market penetration projected at 40 to 45 percent. A total volume of 715,000 to 1.1 million tourist visitors is thus estimated, bringing the aggregate aquarium visitation level to 840,000 in 1981 and approximately 1.4 million by 1990. Tourists will comprise 80 to 85 percent of all aquarium attendees, for an attendance profile almost exactly the reverse of the public section of the attraction.

It is important to recognize that there is some overlap and double-counting
Table 25

ESTIMATED MARKET PENETRATION AND ATTENDANCE
AT THE PROPOSED ATTRACTION
1981 - 1990

<table>
<thead>
<tr>
<th></th>
<th>Public Park Section</th>
<th>Aquarium Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Market Penetration Rate:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Market -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>300 %</td>
<td>315 %</td>
</tr>
<tr>
<td>Secondary</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Tourist Market -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>Foreign</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Estimated Attendance (thousands):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident Market -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>1,770</td>
<td>2,362</td>
</tr>
<tr>
<td>Secondary</td>
<td>29</td>
<td>47</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,799</td>
<td>2,409</td>
</tr>
<tr>
<td>Tourist Market -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>390</td>
<td>495</td>
</tr>
<tr>
<td>Foreign</td>
<td>130</td>
<td>150</td>
</tr>
<tr>
<td>Subtotal</td>
<td>520</td>
<td>645</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,319</td>
<td>3,054</td>
</tr>
</tbody>
</table>

Source: Table 21, and Harrison Price Company.
between the estimates for the two areas of the park because an indeterminate number of visitors can be expected to visit both sections. The figures are thus not entirely additive. It must also be cautioned that attendance estimation is never a precise exercise, especially when the record of comparable experience is inconclusive and must be supplemented by professional judgment. Moreover, in this case, the removal or contraction in scope of any of the proposed project's major components would affect potential attendance volume to a greater or lesser degree and if major changes in the development plan do in fact take place, a revised attendance and physical planning analysis is considered mandatory. As a consequence of these factors, the foregoing projections should be viewed as elastic, although care has been taken to minimize the margin of error.

PHYSICAL FACILITIES REQUIREMENTS

An analysis of likely patterns of attendance by month, day of week, and hour is necessary to derive physical planning factors. The following paragraphs translate HPC's estimates of attendance at the proposed attraction into requirements for various kinds of physical facilities.

Design Day

Except for parking, it is neither economical nor necessary to plan a physical plant to accommodate absolute peaks in attendance. Rather, a good balance is achieved if facilities are planned for the "design day," an average of the top 15 to 20 days of the year. The result is a park large enough to accommodate the high volume of attendance on three or four peak days, albeit with some crowding, but at the same time, the park is not so large as to appear empty during the slack periods that inevitably occur. In Table 26, the design day crowd for both sections of the proposed facility is derived. The peak month is expected to be December, at which time the peak of the tourist season coincides with one of the traditional resident vacation periods. An estimated 13 percent of total annual attendance will be recorded during December, or 304,500 visitors in the public area and 109,200 visitors in the aquarium area during 1981, for an average weekly volume of 68,100 persons and 24,700 persons in the public and private sections, respectively. The distribution of attendance within the week is particularly important to the
### Table 26

**DESIGN DAY PLANNING CRITERIA**  
**FOR THE PROPOSED ATTRACTION**  
**1981 - 1990**

<table>
<thead>
<tr>
<th></th>
<th>Public Park Section</th>
<th></th>
<th>Aquarium Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated Annual</strong></td>
<td>2,319,000</td>
<td>3,054,000</td>
<td>3,635,000</td>
<td>840,000</td>
</tr>
<tr>
<td><strong>Attendance</strong></td>
<td></td>
<td></td>
<td></td>
<td>1,171,000</td>
</tr>
<tr>
<td><strong>Average Peak Month</strong></td>
<td>301,500</td>
<td>397,000</td>
<td>472,600</td>
<td>109,200</td>
</tr>
<tr>
<td><strong>Attendance (at 13</strong></td>
<td></td>
<td></td>
<td></td>
<td>152,200</td>
</tr>
<tr>
<td><strong>percent)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Peak Weekly</strong></td>
<td>68,100</td>
<td>89,600</td>
<td>106,700</td>
<td>24,700</td>
</tr>
<tr>
<td><strong>Attendance (at 4.43</strong></td>
<td></td>
<td></td>
<td></td>
<td>34,400</td>
</tr>
<tr>
<td><strong>weeks per month)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Design Day</strong></td>
<td>13,600</td>
<td>17,900</td>
<td>21,300</td>
<td>4,900</td>
</tr>
<tr>
<td><strong>Attendance (at 20</strong></td>
<td></td>
<td></td>
<td></td>
<td>6,900</td>
</tr>
<tr>
<td><strong>percent of peak week)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Peak In-Grounds</strong></td>
<td>8,200</td>
<td>10,800</td>
<td>12,800</td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Attendance (at 60</strong></td>
<td></td>
<td></td>
<td></td>
<td>4,100</td>
</tr>
<tr>
<td><strong>percent of design day)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Harrison Price Company*
physical sizing of the park. Analysis of experience at other attractions reveals that attendance typically ranges between 20 and 25 percent on weekend days, and 10 to 12 percent on weekdays. Attractions having year-round or nearly year-round operations report crowd levels at the lower end of this range. It is estimated that the proposed facility will average 20 percent per weekend day in recognition of the year-round operating schedule, which results in a design day attendance volume of approximately 13,600 persons in the public section during 1981, and 4,900 persons in the aquarium section. Corresponding estimates for 1990 are 21,300 persons and 8,200 persons, respectively.

The in-gounds planning factor shown in the table of 60 percent of design day attendance, or 8,200 people in the public area and 3,000 people in the aquarium area in 1981, is based on an analysis of likely arrival and departure patterns, together with envisioned hours of operation and a projected visitor length of stay averaging four to 4.5 hours. This figure represents the maximum holding capacity required for the attraction. Owing to the Mexican custom of a long midday recess in activity, it is expected that arrivals will build up rapidly from opening time through the noon hours, when the in-gounds crowd will reach the 60-percent peak. A lull is then anticipated, with departures beginning to accelerate by 3 p.m. In the aquarium area, a secondary peak of perhaps 40 percent will be attained between 8 and 10 p.m. as visitors arrive for evening events. Given the low crowd levels which are probable in both park sections between 3 and 5 p.m., it may be appropriate to shut down the major shows during these hours. This would reduce operating expenses and provide a respite for employees in observance of local custom. With growth in attendance volume, the required holding capacity of the subject attraction must be increased to 12,800 and 4,900 persons for the two sections, respectively, by 1990.

Food Service and Merchandise Sales Space

Table 27 presents estimates of food service and merchandise sales space needs at the Acapulco attraction. The hourly attendance patterns discussed earlier reveal that the patronage is greatest at midday. Peak food service demand thus will probably occur between 11 a.m. and 2 p.m. Assuming that
Table 27
PROJECTED REQUIREMENTS FOR FOOD AND MERCHANDISE SALES SPACE
AT THE PROPOSED ATTRACTION
1981 - 1990

<table>
<thead>
<tr>
<th></th>
<th>Public Park Section</th>
<th>Aquarium Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Peak In-Grounds Attendance</td>
<td>8,200</td>
<td>10,800</td>
</tr>
<tr>
<td>Maximum Hourly Demand for Food and Beverage Service</td>
<td>1,640</td>
<td>2,160</td>
</tr>
<tr>
<td>Distribution by Type of Facility:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>10 %</td>
<td>10 %</td>
</tr>
<tr>
<td>Snack Stand</td>
<td>90 %</td>
<td>90 %</td>
</tr>
<tr>
<td>Required Hourly Serving Capacity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>160</td>
<td>220</td>
</tr>
<tr>
<td>Snack Stand</td>
<td>1,480</td>
<td>1,940</td>
</tr>
<tr>
<td>Facilities Required:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant Seats (at 1.5 turns/hour)</td>
<td>110</td>
<td>150</td>
</tr>
<tr>
<td>Snack Stand Windows (at 150 servings per window hourly)</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Merchandise Sales Space Requirements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Estimated Gross Sales (thousands of pesos)</td>
<td>9,276</td>
<td>21,378</td>
</tr>
<tr>
<td>Projected Sales Rate per Square Meter (pesos)</td>
<td>31,500</td>
<td>31,500</td>
</tr>
<tr>
<td>Total Area Required (square meters)</td>
<td>290</td>
<td>680</td>
</tr>
</tbody>
</table>

1 Assumes that 60 percent of the peak in-grounds crowd will require food service over a three-hour period, or 20 percent per hour.
2 From Table in Section 6.

Source: Harrison Price Company.
demand will be fairly evenly distributed over this three-hour period, a maximum demand for 1,640 meals or snacks per hour is indicated for the public section of the park, and 600 per hour for the aquarium area. At the proposed attraction, this demand will be allocated among two basic types of food service facilities—restaurants and snack stands—but in different proportions in the two areas of the park. The public section will be heavily oriented to snack stands (90 percent of total demand), while the aquarium section will emphasize restaurants (60 percent of total demand). For the public park area, these parameters translate into 110 restaurant seats in 1981 and 170 seats in 1990, on the basis of normal turnover factors. The required number of snack stand serving windows ranges from 10 to 15 over the planning period. In the aquarium section, restaurant demand is calculated at 240 seats in 1981, rising to 390 seats by 1990, while only two to three snack stand serving windows are indicated over this period.

Table 27 also estimates merchandise sales space requirements. Based on per capita visitor spending estimates developed in Section 6 of this report, gross revenues in this expenditure category are expected to total $464,000 (MN 9.3 million) in 1981 in the public park section, and $1.3 million (MN 29.4 million) in the aquarium section, with corresponding totals for 1990 being $1.7 million (MN 36.4 million) and $5.1 million (MN 114.4 million), respectively. Generally, merchandise sales at recreation attractions approximate $1,100 to $1,700 MN 24,750 to 38,250 per square meter annually. Using the midpoint of this range, or $1,400 (MN 31,500) per square meter, some 290 square meters of merchandise sales space are required for the public section of the park in 1981, increasing to 1,150 square meters by 1990. In the aquarium section, merchandise sales space demand ranges from 930 to 3,630 square meters over the planning period.

Parking Space

The one component in a recreation enterprise which must be planned for absolute peaks in attendance is parking, since the availability of a place to park is a prerequisite to attendance. By US standards, however, parking demand at the Acapulco site is expected to be comparatively modest due to the relatively low incidence of auto ownership among the resident population.
(refer to Table 6) and the tourist propensity to rely on taxis or charter buses if travelling in an organized group. It is, moreover, impossible to predict with any great accuracy just how many of the park's attendees will actually arrive by auto, since there is no local experience that would provide a frame of reference (this information was repeatedly solicited from the Centro Acapulco but never obtained). The parking demand estimates shown in Table 28 are thus very rough and preliminary and should be revised as better data on visitor tendency to drive to the site become available.

As indicated, the absolute peak in attendance at the proposed attraction is estimated to be 20 percent higher than design day attendance, or 9,840 visitors in the public section of the park in 1981 and 3,600 visitors in the aquarium section. According to previous attendance projections, some 77 percent of all attendees to the public area will be residents in the initial year. Of these residents, a theoretical estimate of 40 percent will be travelling to the site in private vehicles. Using a factor of five persons per auto in recognition of the large family groups characteristic of the resident market (refer to Table 5), the total number of auto spaces required in 1981 amounts to 610. Similar calculations for the two segments of the tourist market (using different planning factors to reflect lower propensity to drive) yield a requirement for an additional 130 spaces, for an aggregate demand of 740 spaces. At 310 vehicles per hectare, roughly 2.4 hectares would be absorbed by parking facilities. Demand for auto parking generated by the aquarium complex comes to 200 spaces initially using the same methodology, or 0.6 hectares. After 10 years of operation, requirements will grow to 1,150 spaces (3.7 hectares) in the public section and 330 spaces (1.1 hectares) in the aquarium section.

Again, these forecasts are rough and tentative. Also, there are the further considerations of overlap in attendance, which will reduce the combined parking requirement to an unidentifiable degree and, conversely, the potential need for charter bus parking, which may increase the combined requirement if auto parking estimates shown prove to be at all reasonable. No allowance, furthermore, has been made for employee parking. This is a major and critical area of the planning program that must be more definitively addressed at an early date to ensure that adequate land area is set aside. Without
Table 28
ESTIMATED PARKING REQUIREMENTS
FOR THE PROPOSED ATTRACTION
1981 - 1990

<table>
<thead>
<tr>
<th></th>
<th>Public Park Section</th>
<th>Aquarium Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated High Day, Peak Hour Attendance¹</td>
<td>9,840</td>
<td>12,960</td>
</tr>
<tr>
<td>Estimated Attendance Distribution:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents</td>
<td>77 %</td>
<td>79 %</td>
</tr>
<tr>
<td>Tourists - Domestic</td>
<td>17 %</td>
<td>16 %</td>
</tr>
<tr>
<td>Foreign</td>
<td>6 %</td>
<td>5 %</td>
</tr>
<tr>
<td>Number of Attendees:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents</td>
<td>7,580</td>
<td>10,240</td>
</tr>
<tr>
<td>Tourists - Domestic</td>
<td>1,670</td>
<td>2,070</td>
</tr>
<tr>
<td>Foreign</td>
<td>590</td>
<td>650</td>
</tr>
<tr>
<td>Number Arriving by Auto:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents (at 40 percent)</td>
<td>3,030</td>
<td>4,100</td>
</tr>
<tr>
<td>Tourists - Domestic (20 percent)</td>
<td>330</td>
<td>410</td>
</tr>
<tr>
<td>Foreign (10 percent)</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Number of Autos:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residents (at 5 persons/car)</td>
<td>610</td>
<td>820</td>
</tr>
<tr>
<td>Tourists - Domestic (at 3.5 persons/car)</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Foreign (at 2.0 persons/car)</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>740</td>
<td>970</td>
</tr>
<tr>
<td>Total Parking Area Required (at 310 Cars per Hectare)</td>
<td>2.4 ha</td>
<td>3.1 ha</td>
</tr>
</tbody>
</table>

¹ Estimated to be 20 percent higher than design day attendance.

Source: Harrison Price Company
sufficient parking, an artificial constraint will be imposed on attendance performance.

PRELIMINARY ORGANIZATION AND STAFFING GUIDELINES
The final planning issue to be examined in this section of the report is the level of employment necessary to ensure the efficient and orderly operation of all attractions and facilities. Table 29 sets forth a preliminary estimate of administrative staff positions by department, as drawn from the experience of major existing recreation attractions and the recommendations of Sea World consultants. A total of seven functional departments have been identified: administration, marketing, operations, maintenance, general services, finance, and animal facilities. Each department, as shown, is headed by a director, who reports to the park's general manager. Some 55 to 62 administrative positions will be required in all, including seasonal staff in certain functional areas where the workload varies in accordance with attendance volume (general services and finance). Administrative staff would oversee operations of both sections of the proposed attraction.

To permit an indication of the employment generated by the park as a whole, Table 30 summarizes the staff levels at selected marine attractions and presents a ratio of total employment per thousand attendees. As shown, the major private marine parks characteristically are much more labor-intensive than public aquariums, with totals ranging up to 1,000 workers and ratios of up to 0.71 employees per thousand attendance. The average ratio for these attractions is about 0.40 workers per thousand visitors. Applying this figure to the estimated attendance volume for the aquarium section of the proposed attraction yields a total of approximately 335 jobs in 1981 and 560 jobs by 1990 (these estimates would be inclusive of the administrative staffing needs discussed previously). Roughly half of this total would be seasonal or part-time in nature.

The same ratio is not applicable in the case of the public park section, where employment requirements should be considerably less, given its lower key activity program and fewer structural facilities. HPC preliminarily estimates that a 20-percent increase in the estimate for the aquarium section would be sufficient to cover public park operations (with additional
Table 29
PRELIMINARY ADMINISTRATIVE STAFFING GUIDELINES FOR THE PROPOSED AtTRACTION

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>State Government Representative</td>
<td>1</td>
</tr>
<tr>
<td>General Manager</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Receptionist</td>
<td>1</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Public and Guest Relations</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Merchandise Sales</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Group Sales</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Manager, Marketing</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Manager, Public Relations</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerks</td>
<td>2</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Shows/Games/Arcade</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Food and Beverage</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Mechanical Systems</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Electrical Systems</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Water and Plumbing Systems</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Carpentry and Painting</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Landscaping</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Janitorial Services</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Accounting</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Payroll</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Cash Control</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>2</td>
</tr>
<tr>
<td>Seasonal Staff, Accounting</td>
<td>2-6</td>
</tr>
<tr>
<td>Animal Facilities</td>
<td></td>
</tr>
<tr>
<td>Curator, Mammals</td>
<td>1</td>
</tr>
<tr>
<td>Curator, Fishes</td>
<td>1</td>
</tr>
<tr>
<td>Curator, Birds</td>
<td>1</td>
</tr>
<tr>
<td>Chief, Animal Training</td>
<td>1</td>
</tr>
<tr>
<td>Marine Veterinarian</td>
<td>1</td>
</tr>
<tr>
<td>Total Staff</td>
<td>55-62</td>
</tr>
</tbody>
</table>

Source: Sea World, Inc., and Harrison Price Company.
Table 30
EMPLOYMENT LEVELS AT SELECTED AQUARIUM ATTRACTIONS
1977 - 1978

<table>
<thead>
<tr>
<th>Aquarium</th>
<th>Number of Employees</th>
<th>Employees Per Thousand Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent</td>
<td>Seasonal/Part Time</td>
</tr>
<tr>
<td>Private Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanna Barbera Marineland</td>
<td>85</td>
<td>220</td>
</tr>
<tr>
<td>Marineland of Florida</td>
<td>110</td>
<td>55</td>
</tr>
<tr>
<td>Marine World/Africa USA</td>
<td>150</td>
<td>450</td>
</tr>
<tr>
<td>Sea Life Park</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>Sea World (San Diego)</td>
<td>376</td>
<td>618</td>
</tr>
<tr>
<td>Sea World (Orlando)</td>
<td>450</td>
<td>550</td>
</tr>
<tr>
<td>Public or Quasi-Public Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Aquarium</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>New York Aquarium</td>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td>Seattle Aquarium</td>
<td>28</td>
<td>72</td>
</tr>
<tr>
<td>Shedd Aquarium</td>
<td>75</td>
<td>19</td>
</tr>
</tbody>
</table>

1 Figures may include a certain amount of volunteer labor (marine science students, and so on.

Source: American Association of Zoological Parks and Aquariums, 1977-78 Directory of Zoos and Aquariums; and Harrison Price Company.
employment needs concentrated in food and beverage services, maintenance, and security/crowd control), for a combined total estimated employment of about 400 jobs in 1981 and 670 jobs in 1990. These projections are intended only as a guide and merit closer analysis as the planning program continues.
Section 6
PRELIMINARY FINANCIAL ANALYSIS

The proposed attraction's financial performance ultimately depends on admission charges and visitor expenditures, but also important are the policy adopted with regard to leasing certain elements of the park to independent concessionaires and/or sponsors, and the cost of building and operating the component facilities. This section of the report examines estimated operating revenues and expenses to allow a preliminary appraisal of financial performance. Because the development plan is not yet finalized, HPC has independently made certain assumptions that influence the projected economic outlook. In each instance, an effort was made to ensure that the assumption was conservative and that the project is assessed as realistically as possible within the margin of uncertainty which exists as to its specific content. This analysis, however, will require revision as the planning effort becomes more definitive.

ESTIMATED OPERATING REVENUES

Operating revenue at a recreation attraction typically is derived from visitor expenditures on admissions, food and beverage service, merchandise, and ancillary facilities not covered by the basic admission price. The following paragraphs explore the major sources of revenue available to the proposed facility.

Per Capita Visitor Expenditures

The level of visitor spending at recreation attractions depends primarily on two factors: the length of stay in the park, and the admission pricing policy adopted by park management. To establish a basis for projections, it is assumed that the scope and quality of development will conform to that described previously in this report, which was geared to achieving a length of stay of about four to 4.5 hours. This estimated duration of stay should generate the per capita spending levels presented in Table 31. As indicated, there is a great difference in the revenue generation capability of the two sections of the park in accordance with vastly different content and different
Table 31
ESTIMATED PER CAPITA EXPENDITURES
AT THE PROPOSED ATTRACTION
1981 - 1990

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>$0.20</td>
<td>4</td>
<td>$0.31</td>
<td>7</td>
<td>$0.44</td>
<td>10</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>0.75</td>
<td>17</td>
<td>1.21</td>
<td>27</td>
<td>1.77</td>
<td>40</td>
</tr>
<tr>
<td>Merchandise</td>
<td>0.20</td>
<td>4</td>
<td>0.32</td>
<td>7</td>
<td>0.47</td>
<td>10</td>
</tr>
<tr>
<td>Games/Arcade</td>
<td>0.15</td>
<td>3</td>
<td>0.24</td>
<td>5</td>
<td>0.35</td>
<td>8</td>
</tr>
<tr>
<td>Aerial Tram Ride</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Animal Food</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Rentals</td>
<td>0.05</td>
<td>1</td>
<td>0.08</td>
<td>2</td>
<td>0.12</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>$1.35</td>
<td>29</td>
<td>$2.16</td>
<td>48</td>
<td>$3.15</td>
<td>71</td>
</tr>
</tbody>
</table>

1 Assumes an annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 Based on admission prices and attendance mix as discussed in the accompanying text.

Source: Harrison Price Company
market orientation. A discussion of the estimated breakdown of visitor expenditures at the proposed attraction follows.

Admissions Expenditures

For the public park, where local residents will dominate the attendance mix, admissions are expected to provide about 15 percent of total revenue. A nominal admission price of about $0.25 (MN 5) has been assumed, with children four years of age or under admitted free. Based on the earlier analysis of the age distribution of the resident market (refer to Table 4), it is estimated that approximately 15 percent of all resident visitation will be comprised of very young children, while little of the tourist attendance is expected to fall into the free-admission category. Overall, a total of 270,000 free admissions is anticipated for the public section of the park in 1981, leaving approximately two million paid admissions. When the latter sum is multiplied by the indicated admission price and then divided by the total projected attendance, the weighted average per capita revenue yield from admissions is about $0.20 (MN 4), as shown below:

\[
2,049,000 \times MN \ 5 = 10,245,000 \\
10,245,000 \div 2,319,000 = MN \ 4 \ per \ capita \ (rounded)
\]

For future years, a uniform inflation factor of 10 percent per annum has been assumed, reflecting the higher rate of price increase being experienced in Mexico vis-a-vis the United States. Given this factor and further allowing for slight shifts in attendance mix over the planning period, per capita revenues from admissions will reach $0.31 (MN 7) in 1986 and $0.44 (MN 10) by 1990.

In the case of the park's tourist-oriented aquarium operations, admissions will contribute a much larger proportion of total revenue, estimated at some 40 percent. Here, HPC has assumed a 1981 admission price schedule of $5.50 (MN 125) for adults (defined as ages 12 and over), $4.25 (MN 95) for children five to 11 years old, and free admission for children four years and under. These prices are somewhat lower than prevailing prices for comparable attractions in the US (refer to Table 22), but are believed reasonable in the present instance because of the savings potentially available in
construction and operating costs in Mexico, which will reduce the admission fee needed to support operations. About 15 percent of resident attendees and 15 percent of tourist attendees are expected to fall into the free admission category, while 25 percent of resident attendance and 15 percent of tourist attendance should be comprised of children between five and 11 years of age. A residual of 657,000 adult admissions thus results. Since the proposed attraction will be open at night for dining, shopping, and selected entertainment activities, at which time there will be no charge for admission, it is necessary to divide the latter adult admissions into paid and unpaid categories (few, if any, young children can be expected for evening events, so an adjustment is not indicated for the under-12 age group). Taking into account the emphasis on full service restaurant dining in this section of the park, together with the physical capacity guidelines established previously, it is estimated that 20 percent of all adult attendance will occur after dark and thus generate no admissions revenue.

A further adjustment is necessary to reflect the probability of a certain amount of discounted admissions, principally to tour groups. Assuming that 25 percent of all paid admissions are discounted at an average rate of 15 percent (as drawn from experience elsewhere), the overall discount factor would amount to some 4 percent (25 percent x 15 percent = 3.75 percent). Combining the various adjustment factors just described, the weighted average per capita admissions expenditure for the aquarium operation comes to $3.95 (MN 89) in 1981, as calculated below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Admission Number</th>
<th>Multiplier</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 4 or under</td>
<td>55,000</td>
<td>free</td>
<td>0</td>
</tr>
<tr>
<td>Adults after dark</td>
<td>131,000</td>
<td>free</td>
<td>0</td>
</tr>
<tr>
<td>Children 5 - 11</td>
<td>128,000</td>
<td>MN 95</td>
<td>12,160,000</td>
</tr>
<tr>
<td>Adults, daytime</td>
<td>526,000</td>
<td>MN 125</td>
<td>65,750,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>77,910,000</strong></td>
<td></td>
<td><strong>77,910,000</strong></td>
</tr>
</tbody>
</table>

77,910,000 less 4-percent discount = 74,794,000

77,794,000 ÷ 840,000 = MN 89 per capita

Again, admissions expenditure estimates for future years incorporate a 10-percent annual inflation rate and take into account changes in attendance mix. The 1986 per capita expenditure on admissions is forecast at $6.31
(MN 142), while the 1990 figure should amount to $9.49 (MN 209).

**Food and Beverage Expenditures**

For most visitors, eating is an integral part of the overall entertainment package experienced at a recreation attraction. From the practical point of view, the several hours spent at the park dictate that many visitors will eat at least one meal or snack during their stay. Furthermore, most people visit recreation attractions fairly infrequently and are therefore eager to participate in all of the pleasures the park has to offer. One of these pleasures is eating in some unusual and enjoyable environment. To the degree that various food service facilities actually provide the visitor with a delightful experience, food and drink spending increases accordingly. There are limits, of course, to the level of expenditure that can be generated, with length of stay being the key. Per capita expenditures on food service at long-stay attractions (six to eight hours) now run in the area of $2.75 to $4.00 (MN 62 to 90), while intermediate-stay attractions (four to five hours) report spending in the $0.50 to $1.25 (MN 11 to 28) range.

The proposed facility will fall into the intermediate-stay category; however, the spending parameters just described would only apply to the aquarium operation. The reliance on snack stands in the public section of the park, coupled with the discretionary income limitations of the resident population, suggest that spending rates will be comparatively modest. They are not expected to be inordinately low, however, due to the only nominal expense required for admissions, which implies greater potential for spending on non-admission items, and especially food, since the large picnic area to be developed at the site will be one of the main motivations to attend. HPC estimates that a per capita expenditure of $0.75 (MN 17) is realistic for the public park in 1981. When inflated at 10 percent annually, this expenditure grows to $1.21 (MN 27) in 1986 and $1.77 (MN 40) by 1990. Food and beverage sales will thus contribute the largest revenue share in the public operation, with slightly more than half of the total over the planning period.

For the aquarium section of the park, a per capita expenditure on the order of $2.00 (MN 45), or the average for comparable existing facilities, seems realistic for daytime operations. The fact that all of the park's restaurants
will remain open at night, however, augments the revenue-generation potential of food service facilities, particularly if developed in a high-quality manner and offering supplementary live entertainment. With an estimated 20 percent of all adult attendance, or 131,000 persons in 1981, occurring during evening hours and assuming an average check of perhaps $12.00 (MN 270), total nighttime restaurant sales would amount to some $1.6 million (MN 35.4 million). When this figure is divided by total 1981 attendance at the attraction as a whole, the resulting per capita representing evening sales would come to $1.85 (MN 42). Aggregate per capita food and beverage revenue from both day and night operations would thus total $3.85 (MN 87).

To the extent that the park's restaurants fall short of the 'high-quality, full-service' definition, of course, food and drink spending will decrease accordingly, and the preceding estimates may prove overly optimistic. On the other hand, it is in the park's best interests to ensure a superior dining/entertainment offering during evening hours, or the objective of creating a nighttime complex of sufficient strength to compete with other similar opportunities in Acapulco (notably the Centro) will not be met. It should be additionally noted that food and beverage service at commercial recreation attractions is highly vulnerable to public criticism. Cleanliness, good quality, and menu variety and appeal are all essential in successful food operations. Without these qualities, the reputation of the proposed attraction would most certainly suffer, and attendance potentials will be negatively affected. The placement of food service facilities should take into account economies of operation as well as visitor convenience, and location should complement rather than conflict with the free movement of visitors.

**Merchandise Expenditures**

The sale of merchandise at recreation attractions typically generates less revenue than food sales since the visitor's interest in the park is as entertainment, food being part of the overall "show." Any interest the visitor has in merchandise is usually directed toward inexpensive souvenirs of his visit and such immediately usable items as hats and film. Like food and beverage sales, merchandise expenditures are partly a function of length of
stay, but in this case, the quality and type of goods offered becomes even more important. Merchandise expenditures at long-stay attractions tend to exceed those of short-stay attractions, but not by as much as might be expected—$1.25 to $1.75 (MN 28 to 39), as compared to $0.50 to $1.10 (MN 11 to 25), respectively. By the same token, where extraordinary merchandising efforts are made, such as those in connection with on-site handicrafts demonstrations and other novel situations, sales of merchandise can exceed $3.00 (MN 68) per capita regardless of stay time.

In the present instance, merchandise sales in the public section of the park are expected to be comparatively modest, averaging $0.20 (MN 4) per capita in 1981 due to the likelihood that this section's predominantly resident-oriented attendance mix implies limited propensity for non-essential retail purchases. After allowing for inflation, this expenditure level will rise to $0.32 (MN 7) in 1986 and $0.47 (MN 10) in 1990. The aquarium section, in contrast, should generate fairly substantial merchandise sales, especially if a performing crafts program is instituted as currently under consideration. When a visitor can watch an item being made and perhaps even take a hand in its creation, his comprehension of the skill and artistry involved is heightened and his inclination to buy the item accordingly increases. An average per capita expenditure of $1.55 (MN 35) is forecast for 1981, rising with inflation to $2.50 (MN 56) in 1986 and $3.65 (MN 82) by 1990. Merchandise expenditures will therefore represent 15 percent of total visitor spending in the aquarium section during the 10-year planning period of this study.

Games/Arcade Expenditures

Among the minor sources of revenue at a recreation attraction is visitor spending on games and arcade operations. HPC estimates that public park attendees will generate an average of $0.15 (MN 3) per capita in 1981. Estimates for 1986 and 1990 are $0.24 (MN 5) and $0.35 (MN 8), respectively, after incorporating the inflation allowance. For the aquarium section, rates of spending in this category should more closely approximate prevailing experience at existing attractions, and are projected at $0.30 (MN 7) per capita in 1981, growing to $0.48 (MN 11) in 1986 and $0.71 (MN 16) by 1990.
Aerial Tram Ride

The aquarium section of the proposed attraction is to include an aerial tram ride, which will provide additional revenues from visitor spending. Using current experience elsewhere as a guide, HPC estimates that some 30 percent of total aquarium attendees will ride the tram. Assuming an admission price of about $0.85 (MN 20) for persons five years of age and older, with children under four admitted free, approximately 236,000 paid admissions would result in 1981 (attendance mix assumptions used in deriving this estimate correspond to those described earlier for general admissions expenditures). The weighted average per capita expenditure thus amounts to $0.25 (MN 6) in 1981, as shown below:

\[
\text{236,000 paid admissions} \times \text{MN 20} = 4,720,000 \\
4,720,000 \div 840,000 = \text{MN 6 per capita}
\]

Respective estimates for 1986 and 1990 are $0.40 (MN 9) and $0.58 (MN 13).

Animal Food Expenditures

Another source of revenue available to the aquarium operation is the sale of fish for marine mammals in the contact pools, and bird food. Sea World reports a current per capita expenditure of $0.05 to $0.07 (MN 1 to 2) on these items, which should be a reliable indication of what can be achieved at the subject attraction. HPC has utilized the lower figure of $0.05 (MN 1) in this analysis, which increases with inflation to $0.08 (MN 2) in 1986 and $0.12 (MN 3) in 1990.

Rentals

The final visitor spending category to be examined in this analysis is rentals of strollers, wheelchairs, cameras, and storage lockers, items which are typically provided at recreation attractions as a convenience to visitors. Here, the per capita expenditure rate is assumed to be the same for both sections of the park, amounting to $0.05 (MN 1) in the initial year, $0.08 (MN 2) in the fifth year, and $0.12 (MN 3) at the end of the planning period.
Aggregate Visitor Expenditures

Total visitor spending on all items at the proposed attraction is estimated at $1.35 (MN 29) per capita for the public section and $10.00 (MN 226) per capita for the aquarium section in 1981. By 1990, the respective sums will be $3.15 (MN 71) and $23.55 (MN 530). These estimates are, of course, preliminary and should be viewed in that light. Should any major change be made in the attraction's proposed content, visitor spending potential could be affected and the foregoing estimates would then require revision.

Total Operating Revenue

Total gross operating revenues from all visitor spending at the proposed attraction are presented in Table 32. As indicated, the public park operation will generate some $3.1 million (MN 67.3 million) in the initial year, rising to approximately $11.4 million (MN 258.1 million) by 1990. Total gross revenue estimates for the aquarium operation are about $8.4 million (MN 189.8 million) in the first year of operation and $32.9 million (MN 739.4) at the end of the planning period. The text table below shows the percentage distribution of revenues by source for the two sections of the park, using 1986 to represent a stabilized year of operation:

<table>
<thead>
<tr>
<th>Percent of Total</th>
<th>Public Section</th>
<th>Aquarium Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>14 %</td>
<td>39 %</td>
</tr>
<tr>
<td>Food/Beverage</td>
<td>56</td>
<td>39</td>
</tr>
<tr>
<td>Merchandise</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Games/Arcade</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Aerial Tram</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Animal Food</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Rentals</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

The largest source of revenue in the public operation, as shown, will be food and beverage sales, with 56 percent of the total, while the chief revenue generators in the aquarium section will be food sales and admissions,
### Table 32

**Estimated Total Operating Revenue At the Proposed Attraction**

**1981 - 1990**

(Thousands)

<table>
<thead>
<tr>
<th>Revenue Category</th>
<th>Public Park Section</th>
<th></th>
<th></th>
<th></th>
<th>Aquarium Section</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Admissions</strong></td>
<td>$ 464</td>
<td>$ 9,276</td>
<td>$ 947</td>
<td>21,378</td>
<td>$ 1,599</td>
<td>36,350</td>
<td>$ 3,318</td>
<td>74,760</td>
</tr>
<tr>
<td><strong>Food and Beverage</strong></td>
<td>1,739</td>
<td>39,423</td>
<td>3,695</td>
<td>82,458</td>
<td>6,434</td>
<td>145,400</td>
<td>3,234</td>
<td>73,080</td>
</tr>
<tr>
<td><strong>Merchandise</strong></td>
<td>464</td>
<td>9,276</td>
<td>977</td>
<td>21,378</td>
<td>1,708</td>
<td>36,350</td>
<td>1,302</td>
<td>29,400</td>
</tr>
<tr>
<td><strong>Games/Arcade</strong></td>
<td>348</td>
<td>6,957</td>
<td>733</td>
<td>14,270</td>
<td>1,272</td>
<td>29,080</td>
<td>252</td>
<td>5,880</td>
</tr>
<tr>
<td><strong>Aerial Tram Ride</strong></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>210</td>
<td>5,040</td>
</tr>
<tr>
<td><strong>Animal Food</strong></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>42</td>
<td>840</td>
</tr>
<tr>
<td><strong>Rentals</strong></td>
<td>116</td>
<td>2,319</td>
<td>244</td>
<td>6,108</td>
<td>436</td>
<td>10,905</td>
<td>42</td>
<td>840</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 5,313</td>
<td>$ 67,251</td>
<td>$ 6,596</td>
<td>146,592</td>
<td>$ 11,449</td>
<td>258,085</td>
<td>$ 8,400</td>
<td>189,840</td>
</tr>
</tbody>
</table>

**Estimated Gross Operating Revenues:**

2. Total: $ 5,313.

**Estimated Net Revenue Accruing to Operating Entity:**

2. Total: $ 5,313.

---

1 Assumes an annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 Total sales less a 40-percent cost of goods allowance.

Source: Tables 25 and 31, and Harrison Price Company.
each providing 39 percent of the total. To arrive at net revenue, HPC has assumed that all operations save admissions and minor services (animal food in the aquarium section and rentals in both section) would be operated by concessionaires, including the aerial tram ride. Various figures denoting a percentage of gross sales were then applied in these categories as derived from typical practice in the United States, yielding the revenue accruing to the park's operating entity. A factor of 12 percent was used for food service facilities, which is an average rate for a mix of snack stands and restaurants (the rate usually being higher on the former), 15 percent for merchandise facilities, and 20 percent for the games/arcade and aerial tram operations. The latter facility might attract a sponsor, as previously mentioned, in which case it would be operated under an institutional lease rather than a concession agreement. If an institutional sponsor is in fact obtained, revenues to the operating entity would be somewhat lower than indicated here, since the sponsor rather than the park would incur the cost of tram development. For purposes of this analysis, however, a concession operation has been assumed.

On the basis of the various assumptions just described, net operating revenue is equivalent to $929,000 (MN 19.1 million) for the public park section in 1981, increasing to $3.3 million (MN 67.0 million) by 1990. Corresponding estimates for the aquarium section are about $4.1 million (MN 91.5 million) and $15.9 million (MN 357.7 million), respectively. It should be noted that prevailing concession lease rates in Mexico could differ from the US averages shown here, and a more thorough examination of current practice will be necessary as the implementation program proceeds.

**Estimated Total Net Operating Revenue**

In the preceding discussion of revenues accruing to the operating entity, there are two major attractions not yet accounted for—the amphitheater and the observation tower. Because these facilities will be open during evening hours and thus be accessible to the general public rather than park visitors only, they represent a source of revenue beyond that generated by visitor spending in the park. Table 33 contains revenue estimates for these two attractions, the derivation of which is described subsequently.
Table 33
ESTIMATED TOTAL NET REVENUES
ACCRUING TO THE OPERATING ENTITY
1981 - 1990
(Thousands)

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Park Operations</td>
<td>$929</td>
<td>19,108</td>
<td>$1,928</td>
<td>43,642</td>
<td>$3,317</td>
<td>66,972</td>
</tr>
<tr>
<td>Aquarium Operations</td>
<td>4,060</td>
<td>91,468</td>
<td>9,055</td>
<td>204,222</td>
<td>15,871</td>
<td>357,651</td>
</tr>
<tr>
<td>Amphitheater Operations</td>
<td>1,498</td>
<td>33,705</td>
<td>3,211</td>
<td>72,240</td>
<td>5,880</td>
<td>132,300</td>
</tr>
<tr>
<td>Observation Tower Operations</td>
<td>138</td>
<td>3,095</td>
<td>259</td>
<td>5,822</td>
<td>417</td>
<td>9,383</td>
</tr>
<tr>
<td>Total</td>
<td>$6,625</td>
<td>147,376</td>
<td>$14,453</td>
<td>325,926</td>
<td>$25,485</td>
<td>566,306</td>
</tr>
</tbody>
</table>

1 Assumes annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 Based on operating guidelines described in the accompanying text.
3 Assumes sponsorship by institutional lessee, with 10 percent of gross revenues accruing to the park operating entity.

Source: Table 32 and Harrison Price Company.

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Amphitheater Operations

Amphitheater revenue is basically a function of seating capacity and admission price. Assuming a 1,000-seat facility as presently envisioned, and perhaps 300 operating days per year (which assumes that the facility would be "dark" at least one night per week when expected attendance does not warrant operation), a total of 300,000 annual visitors could be accommodated if one show is held per evening. In practice, it is likely that two shows will be held each evening during peak operating periods. Assuming an overall annual average of 1.5 shows per night, capacity would rise to 450,000 visitors at maximum. Facilities of this type rarely achieve optimum efficiency, however, due to last-minute cancellations by large groups, weather conditions which prevent operation on certain days, and other similar factors, so that the actual utilization rate commonly averages 70 percent of maximum capacity. On this basis, the effective capacity of the amphitheater amounts to 315,000 visitors annually. Admission prices will probably vary with the type of production being presented, but using the experience of the Centro Acapulco as a guide, it is assumed that prices would average about $5.00 (MN 115) per adult and $3.75 (MN 85) per child. The attendance mix at an evening-oriented entertainment facility will be heavily adult, with the estimated ratio being at least 9:1 (indicating that only 10 percent of total attendance would be comprised of children). The calculation of the weighted average admission price thus is as follows:

\[
\begin{align*}
\text{Child} &= 32,000 \times \text{MN 95} = 3,040,000 \\
\text{Adult} &= 283,000 \times \text{MN 115} = 32,545,000 \\
\text{Total} &= 35,585,000 \\
35,585,000 \div 315,000 &= \text{MN 112 per capita}
\end{align*}
\]

In accordance with the admission discount policy described earlier for the aquarium operation, this per capita figure must be further reduced by a factor of 4 percent, yielding net per capita amphitheater revenue of about $4.75 (MN 107), for total gross revenues of approximately $1.5 million (MN 33.7 million) in 1981. For future years, a 10-percent inflation rate has been assumed for admission prices, along with an increase in the average number of shows to two presentations daily in 1986 and 2.5 presentations daily by 1990. Revenues from amphitheater operations thus will increase to about
$3.2 million (MN 72.2 million) by the fifth year of operation and some $5.9 million (MN 132.3 million) at the end of the planning period.

**Observation Tower**

The observation tower will be an especially unique addition to the Acapulco attractions inventory since it will offer a spectacular panoramic view of Acapulco Bay and environs not available from any other vantage point in the area. As a result, it can be expected to have widespread public appeal, and since no park admission fee will be required after dark, many people may come to the subject site expressly for this purpose. HPC thus forecasts a gross market (residents and tourists) capture rate of 35 percent for the tower attraction. This is equivalent to a total attendance volume of about 1.2 million people in 1981, 1.4 million in 1986, and 1.5 million in 1990, based on market size estimates presented earlier in this report (refer to Table 21). Assuming an admission price of $1.35 (MN 30) per adult, $0.85 (MN 20) per child five to 11 years of age, and free admission for children four years or under, together with attendance mix assumptions corresponding to those described earlier for the aquarium section of the park, the weighted average per capita admission fee would amount to $1.16 (MN 26) in 1981, as calculated below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Attendance (000s)</th>
<th>Rate</th>
<th>Total Revenue (MN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child under 5</td>
<td>76,000</td>
<td>free</td>
<td>0</td>
</tr>
<tr>
<td>Child 5-11</td>
<td>175,000</td>
<td>MN 20</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Adult</td>
<td>915,000</td>
<td>MN 30</td>
<td>27,450,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>30,950,000</strong></td>
</tr>
</tbody>
</table>

Gross revenues from tower operations would thus amount to $1.4 million (MN 30.9 million) in the initial year, rising to $4.2 million (MN 93.8 million) by 1990 after allowing for inflation and modest variations in attendance mix over the period. The tower will likely be built by an institutional sponsor, indicating that only a portion of this revenue will accrue to the park operating entity. HPC has assumed a lease rate of 10 percent of gross operating revenues, for net revenues to the park of $138,000 (MN 3.1 million) in 1981, $259,000 (MN 5.8 million) in 1986, and $417,000 (MN 9.4 million) in 1990.
Aggregate Net Operating Revenues

Combining net revenues accruing from all activities—public park, aquarium, amphitheater, and observation tower—the operating entity at the subject attraction will realize a total of $6.6 million (MN 147.4 million) in 1981 and $25.5 million (MN 566.3 million) by 1990, as Table 33 indicates.

ESTIMATED OPERATING EXPENSES

The estimated cost of operating the proposed complex is presented in Table 34. All parameters used are drawn from the experience of comparable attractions in the United States, but have been adjusted downward somewhat to reflect potential labor and other operating cost savings in Mexico. Using stabilized-year (1986) figures, the distribution of expenses by category is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and Salaries</td>
<td>40 %</td>
</tr>
<tr>
<td>Contract Management</td>
<td>11</td>
</tr>
<tr>
<td>Advertising and Promotion</td>
<td>10</td>
</tr>
<tr>
<td>Maintenance and Repairs</td>
<td>7</td>
</tr>
<tr>
<td>Operating Supplies</td>
<td>5</td>
</tr>
<tr>
<td>Utilities</td>
<td>4</td>
</tr>
<tr>
<td>Insurance</td>
<td>3</td>
</tr>
<tr>
<td>Amphitheater Operations</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

The largest operating expense, as shown, will be incurred in labor, as the content of the proposed attraction is by nature labor-intensive. This share of 40 percent, however, is much lower than would be experienced if the park itself were operating all facilities. As it is, concessionaires will be responsible for payrolls associated with food, merchandise, and other concession operations (concessionaires rather than the park similarly will incur cost of goods sold expenses). Total wages and salaries at the park are estimated at about $2.0 million (MN 44.2 million) in 1981 and $7.7 million (MN 169.8 million) by 1990.
Table 34

ESTIMATED TOTAL OPERATING EXPENSES AT THE PROPOSED ATTRACTION
1981 - 1990
(Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and Salaries</td>
<td>$1,996</td>
<td>44,230</td>
<td>$4,393</td>
<td>99,146</td>
<td>$7,675</td>
<td>169,849</td>
</tr>
<tr>
<td>Contract Management</td>
<td>577</td>
<td>12,855</td>
<td>1,270</td>
<td>28,525</td>
<td>2,215</td>
<td>49,872</td>
</tr>
<tr>
<td>Advertising and Promotion</td>
<td>530</td>
<td>11,790</td>
<td>1,156</td>
<td>26,074</td>
<td>2,039</td>
<td>45,304</td>
</tr>
<tr>
<td>Maintenance and Repairs</td>
<td>331</td>
<td>7,369</td>
<td>723</td>
<td>16,296</td>
<td>1,274</td>
<td>28,315</td>
</tr>
<tr>
<td>Operating Supplies</td>
<td>265</td>
<td>5,895</td>
<td>578</td>
<td>13,037</td>
<td>1,019</td>
<td>22,652</td>
</tr>
<tr>
<td>Utilities</td>
<td>199</td>
<td>4,421</td>
<td>434</td>
<td>9,778</td>
<td>765</td>
<td>16,989</td>
</tr>
<tr>
<td>Insurance</td>
<td>133</td>
<td>2,948</td>
<td>289</td>
<td>6,518</td>
<td>510</td>
<td>11,326</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$4,031</strong></td>
<td><strong>89,508</strong></td>
<td><strong>$8,843</strong></td>
<td><strong>199,374</strong></td>
<td><strong>$15,497</strong></td>
<td><strong>344,307</strong></td>
</tr>
<tr>
<td>Amphitheater Operations</td>
<td><strong>1,049</strong></td>
<td><strong>23,593</strong></td>
<td><strong>2,248</strong></td>
<td><strong>50,568</strong></td>
<td><strong>4,116</strong></td>
<td><strong>92,610</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$5,080</strong></td>
<td><strong>113,101</strong></td>
<td><strong>$11,091</strong></td>
<td><strong>249,942</strong></td>
<td><strong>$19,613</strong></td>
<td><strong>436,917</strong></td>
</tr>
<tr>
<td>Contingency</td>
<td>254</td>
<td>5,655</td>
<td>555</td>
<td>12,497</td>
<td>981</td>
<td>21,846</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$5,334</strong></td>
<td><strong>118,756</strong></td>
<td><strong>$11,646</strong></td>
<td><strong>262,439</strong></td>
<td><strong>$20,594</strong></td>
<td><strong>458,763</strong></td>
</tr>
</tbody>
</table>

---
1 Assumes annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 At 40 percent of net revenues from public park and aquarium.
3 At 5 percent of total gross sales.
4 At 8 percent of total net revenue.
5 At 5 percent of total net revenue.
6 At 4 percent of total net revenue.
7 At 3 percent of total net revenue.
8 At 2 percent of total net revenue.
9 At 70 percent of amphitheater revenues.
10 At 5 percent.

Source: Harrison Price Company
The second largest expense category is amphitheater operations, with 20 percent of the total, or $1 million (MN 23.6 million) in 1981 and $4.1 million (MN 92.6 million) in 1990. This figure is based on the assumption that the cost of producing amphitheater shows will be equivalent to 70 percent of total gross revenues generated by the facility given the experience of comparable attractions. Contract management, another major expense item, is based on a factor of 5 percent of total gross sales in both sections of the park, or $577,000 (MN 12.9 million) in the initial year, increasing to $2.2 million (MN 49.9 million) at the end of the planning period. An additional 10 percent of total operating cost represents advertising and promotion expenses, estimated at $530,000 (MN 11.8 million) in 1981 and $2.0 million (MN 45.3 million) in 1990.

Adding the remaining expense categories and allowing for a 5-percent contingency factor, aggregate operating expenses come to $5.3 million (MN 118.8 million) initially, growing to $11.6 million (MN 262.4 million) in 1986, and $20.6 million (MN 458.8 million) in 1990. Overall, these expenses represent 80 percent of total net revenues, a very high ratio for facilities of this type, but indicative of the low revenue-generation potential of public operations at the site, which are in effect subsidized by the more profitable aquarium operations. Not included in these expense estimates are certain other items that are difficult to assess at this stage of the planning effort, such as employee training costs, cost of contract entertainment, and sales or value added taxes if applicable. If these expenses apply and are of sufficient magnitude, the operating margin would further shrink. On the other hand, other expenses—advertising and contract management, for example—could be less than that estimated here, which would increase the margin. The foregoing estimates thus are preliminary and subject to revision.

ESTIMATED TOTAL NET OPERATING INCOME

A summary of the revenues and expenses associated with operation of the proposed attraction is contained in Table 35, along with net operating income generated. Approximately $1.3 million (MN 28.6 million) in net income is preliminarily projected for 1981, rising to some $4.9 million (MN 107.5 million) by 1990. The initial year figure is equivalent to roughly 5 percent of total initial development costs (or 8 percent of the government
Table 35

ESTIMATED TOTAL NET OPERATING INCOME
AT THE PROPOSED ATTRACTION
1981 - 1990
(Thousands)

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1986</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US Dollars</td>
<td>Mexican</td>
<td>US Dollars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pesos</td>
<td></td>
</tr>
<tr>
<td>Estimated Total Net Operating Revenue</td>
<td>$6,625</td>
<td>147,376</td>
<td>$14,453</td>
</tr>
<tr>
<td>Estimated Total Operating Expenses</td>
<td>5,334</td>
<td>118,756</td>
<td>11,646</td>
</tr>
<tr>
<td>Total Net Operating Income</td>
<td>$1,291</td>
<td>28,620</td>
<td>$2,807</td>
</tr>
</tbody>
</table>

1 Assumes annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.

Source: Tables 33 and 34, and Harrison Price Company.
share of that cost), which is an exceedingly poor rate of return that would not represent a profitable opportunity for a private commercial developer, especially since a private entity would incur additional costs in property and income taxes and debt service. Given non-profit public operation of the subject attraction, however, the residual funds generated by operations can be used to expand and upgrade the facilities as time goes on. With respect to the latter, it will be essential in future years to continually improve the offering in order to provide entertainment capacity commensurate with expected increases in attendance and to stimulate repeat visitation. Without such reinvestment, the market performance of the attraction will be inhibited and attendance volume may fail to attain the levels projected in this report.

Total cumulative net operating income is presented in Table 36. By the end of the planning period, some $28.8 million (MN 640.4 million) will have been accrued. This should be sufficient to support a fairly extensive ongoing expansion program. Some of the components already envisioned for future implementation--such as the shark exhibit--are multi-million-dollar undertakings, and it would appear that the residual income potential of the attraction can accommodate such projects, thereby helping to ensure sustained competitive ability.
Table 36
ESTIMATED CUMULATIVE NET OPERATING INCOME
AT THE PROPOSED ATTRACTION\(^{1}\)
1981 - 1990
(Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
</tr>
</thead>
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<tr>
<td>1981</td>
<td>$1,291</td>
<td>28,620</td>
<td>$1,291</td>
<td>28,620</td>
</tr>
<tr>
<td>1982</td>
<td>1,595</td>
<td>35,593</td>
<td>2,886</td>
<td>64,213</td>
</tr>
<tr>
<td>1983</td>
<td>1,899</td>
<td>42,566</td>
<td>4,785</td>
<td>106,779</td>
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<tr>
<td>1984</td>
<td>2,203</td>
<td>49,539</td>
<td>6,988</td>
<td>156,318</td>
</tr>
<tr>
<td>1985</td>
<td>2,517</td>
<td>56,512</td>
<td>9,505</td>
<td>212,830</td>
</tr>
<tr>
<td>1986</td>
<td>2,807</td>
<td>63,487</td>
<td>12,312</td>
<td>276,317</td>
</tr>
<tr>
<td>1987</td>
<td>3,328</td>
<td>74,501</td>
<td>15,640</td>
<td>350,818</td>
</tr>
<tr>
<td>1988</td>
<td>3,849</td>
<td>85,515</td>
<td>19,489</td>
<td>436,333</td>
</tr>
<tr>
<td>1989</td>
<td>4,370</td>
<td>96,529</td>
<td>23,859</td>
<td>532,862</td>
</tr>
<tr>
<td>1990</td>
<td>4,891</td>
<td>107,543</td>
<td>28,750</td>
<td>640,405</td>
</tr>
</tbody>
</table>

---

1 Assumes annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 Represents funds available for expansion and refurbishment of the subject attraction.

Source: Table 35 and Harrison Price Company.
Appendix A

PROPOSAL FOR CONSULTING SERVICES
FEASIBILITY OF A THEMED PARK ATTRACTION
IN ACAPULCO
March 23, 1979

Fideicomiso Acapulco
Costera M. Aleman 133
Acapulco, GRO, MEXICO

A Proposal for Consulting Services

FEASIBILITY OF A THEMED PARK ATTRACTION
IN ACAPULCO

INTRODUCTION

Fideicomiso Acapulco, a public agency of the State of Guerrero, is charged
with planning and developing a public park and aquarium. The logic behind
the public support of the project—in addition to the creation of a public
park—is that Acapulco's economy benefits from activities which prolong
visitor stay.

Major funding is available to plan and build the project. In addition, the
site to be made available is of great value and quality. It is dead center
in the crescent formed by Acapulco Bay. It is a unique and major property
containing some 20 hectares. Its advantages in addition to centrality and
size are frontage on an excellent public beach, rich natural planting, and
gentle topography—highlighted and dramatized by a hillock 35 meters high
in the north east quadrant of the site.

The goal of the state—in addition to prolonged visitation in Acapulco, en-
hanced employment, and other salutory benefits of such development—is to
blend free public park access with private concession operation of selected
elements of the attraction, so that an economic break-even position is
achieved by the sponsoring governmental entities.

A variety of activities have been suggested for the attraction, including
a saltwater aquarium, seal and dolphin shows, botanical gardens, an aviary,
a water ride serving both as an attraction and an on-site transportation
system, funiculars and overhead aerial trams for in-park transportation, an
amphitheater, a waterslide and aquatic sports area, and certain static ex-
hibits such as a replica of a Chinese sailing vessel and a botanical museum.
In addition, specialty merchandising in a themed environment is considered
to have strong potential drawing power. The same potential is attributed
to the entire array of potential visitor food and drink activities, and as-
associated entertainment.

All of these elements must be put together in a format so that an important
and economically viable attraction is created. The public and private pur-
poses inherent in the project must be blended so that they are mutually re-
fining and so that the overall impact of the park is enhanced—not dis-
persed.

For purposes of improved operational quality, the private phases of opera-
tion may be structured as one single master lease supported by a variety
of individual concession commitments. The master lessee would be respons-
sible for maintaining thematic integrity and unity and operating quality
in all of the private operating areas of the park.

The operating schedule is extremely important; it must reflect potential
for nighttime operations in selected areas and elements of the park. Family
entertainment at night could have considerable reception in Acapulco and do
much to fill a present vacuum.

The project is complex, and the field of activity highly specialized. For
these reasons a consulting program to aid in the planning of the project is
outlined in this proposal.

GENERAL OBJECTIVES OF THE CONSULTING PROGRAM

The general goal of this consulting effort is to develop the specific con-
cept and the feasibility of a themed park attraction in central Acapulco.
It would contain a mix of attractions—an aquarium, a botanical garden,
rides and water sports, specialty shopping, entertainment, restaurants and
other types of food service, and exhibits. It would serve as a major
enhancement of Acapulco's tourist infrastructure appealing to family trade. Among the specific objectives of the consulting assignment are the following:

1. Evaluation of the suitability of the site proposed for the development.
2. Quantification of present and future market support for the project from the local resident market, Mexican and foreign tourism.
3. Development of the format and specific content of the park; selecting elements for private and public operation, refining the thematic orientation of the park and all of its elements, and determining whether or not the proposed park can be set up for nighttime operation with salutory economic results.
4. Development of the probable attendance levels during the project's first 10 years, and of design-day planning parameters.
5. Determination of an optimum plan of development in terms of physical size and initial investment for all elements of the park.
6. Projection of the economic performance of the park, including estimated operating revenues and expenses and preparation of a pro forma financial statement covering the first 10 years of operation. This step would be undertaken from two perspectives: first, the operations of a master lessee, and second, the revenues and expenses accruing to the lessor, the State of Guerrero.
7. Aiding implementation of the project by preparation of an investor package describing the proposed venture, assistance in its distribution, and by screening and suggesting required operating staff.
HARRISON PRICE COMPANY

SCOPE OF WORK

To accomplish the foregoing objectives, the consulting program will include but not necessarily be limited to the following tasks:

Site Location Analysis

This phase of the consulting program will evaluate the site's quality. Factors to be considered in the analysis are:

1. Access to the market—residents and tourists.
2. Topography and natural amenities of the site.
3. Compatibility of adjacent land uses.
4. Existing and proposed access routes.
5. Availability of utilities, especially water.
6. Expansability within the site.
7. Parking availability and requirements.

Market Analysis and Attendance Projections

In this phase of the consulting program, the potential attendance of the proposed park will be analyzed. Resident and tourist market support will be translated into attendance projections. Data to be considered will include:

1. Size of the local and regional resident and non-resident tourist markets.
2. Demographic factors affecting potential attendance, such as family income, family composition, recreation spending, automobile ownership, and so forth.
3. Tourism, including data on its seasonality, average length of stay, visitor expenditures, hotel occupancy data, visitor origin and other factors.
4. Seasonality of the market in terms of weekend, weekday, and monthly visitation potentials.
5. Complementary attendance at other public and private cultural, convention, and entertainment facilities.

6. Market penetration rates at similar and related attractions.

The Content of the Park

The consulting effort will review alternative plans for development of the park. Factors to be analyzed will include physical size, capital investment, entertainment value, and the mix of content. The purpose of this task is to refine the concept and content to one or more alternative programs which can be expressed in terms of types of activities and theme content suitable for the project. A segregation will be made to reflect the dual purpose of the park--free public entry to certain park areas, and ticketed, revenue generating entry to certain concession areas. A segregation will be made to take into account those activities which can operate at night and those which are suitable only for daytime use.

Size of the Park and Its Elements

From the attendance projections and data on seasonality, a design-day capacity will be derived. This target will be utilized in determining the size and capacity requirements of all elements of the park: individual attractions, food and beverage service, merchandise outlets, parking, maintenance and administration.

Planning guidelines will be developed which maximize entertainment quality and diversity and potential length of stay within the constraints of justifiable investment. The size of food/beverage service and space for merchandise/crafts sales will be based on average design-day demand, per capita spending, and sales-per-square-foot objectives.

Cost of the Attraction

Investment requirements will be estimated by cost category on the basis of the recommended scope and size of each element of the park and in consideration of appropriate return-on-investment objectives. The impact of theming on the cost of individual activities in the park will be assessed.
Economic Performance

In this phase of the consulting program, the financial potential of the proposed park will be evaluated from the dual view point of lessor and master-lessee. Revenues and expenses will be projected and incorporated in cash-flow and return-on-investment analyses. Total and per-capita revenue estimates will be made for the following income categories: admissions, individual attractions, shows, merchandise, games, food concessions, and institutional advertising. Operational costs for the proposed park will include estimated administration, labor, advertising, maintenance, insurance, utilities, cost of goods sold, and other expense categories. Finally, operating income and cash flow will be calculated for 10 years. Lease payments accruing to the Government will be estimated.

Implementation

The primary aim of this area of effort will be to provide a presentation package for potential lessees and participants in the park, consulting assistance on staffing the park, and other assistance on planning and start-up as required.

QUALIFICATIONS

The staff of Harrison Price Company has been directly involved in the planning and implementation of several hundred major recreation projects. Detailed references have been submitted to the client. Specific references on our work in this field can be obtained from the managements of Sea World, Inc., Walt Disney Productions, Six Flags, Inc., the Marriott Corporation, Libertyland in Memphis, Grand Ole Opry in Nashville, and many others. We will be happy to assist in any such evaluation.

STAFFING

Work on this project will be performed by Harrison A. Price, assisted by Sharon Dalrymple and/or James McCarthy. Miss Dalrymple has carried out major responsibilities in a multitude of projects in the fields of specialty shopping centers, theme parks, cultural centers (like the Polynesian Cultural Center in Oahu), botanical gardens and the like. Mr. McCarthy headed

TIME AND COST
The time required to complete the feasibility study for this project—excluding implementation, which is a continuing service—is 14 to 16 weeks.

Up to 25 copies of a formal report of feasibility will be submitted to the client. Additional copies are available at cost of reproduction.

The required budget for the feasibility report (those items under Scope of Work except for "Implementation") including staff time (at $500 per day), publication, travel, subsistence while traveling, and all other costs associated with the project, is $35,000. This upper limit is not exceeded unless extra work is specifically authorized by the client. Implementation work is budgeted at $500 per day plus travel expense as authorized by the client.

Terms of payment are fixed on the following schedule:

- $8,750 payable on acceptance of this proposal
- $8,750 payable 5 weeks after start of work
- $8,750 payable 10 weeks after start of work
- $8,750 payable on presentation of the final report

It is agreed by the client that payment for the services of Harrison Price Company is due on the above schedule and that full payment is due upon receipt of the completed feasibility report. All payments should be made to the Los Angeles office of Harrison Price Company in US Dollars. Harrison Price Company has the right to hold up work pending receipt of any overdue payments. It is understood that the fees for undertaking this project are in no way dependent upon the specific conclusions reached or the nature of advice rendered—this stipulation protects our right to submit unbiased and impartial judgments concerning this project. It is understood by Harrison Price Company that the findings submitted are the proprietary property of the client—not to be made available to any other organization or client without the consent of the client.
This proposal will remain in force for a period of 90 days from the date shown hereon.

ACCEPTANCE

Acceptance of this contract may be indicated by returning a signed copy of this proposal, together with the first payment, to Harrison Price Company in Los Angeles. Work will begin within two weeks after its receipt, or sooner.

Should you have any questions concerning the scope of work to be included in this consulting program, we will be happy to discuss them with you and to make any appropriate changes and clarifications.

We look forward to working with you on this most interesting and historical project.

Respectfully submitted,

HARRISON PRICE COMPANY

[Signature]
Harrison A. Price
President

HAP:bb
Enclosures
<table>
<thead>
<tr>
<th>Revenue Category</th>
<th>Public Park Section</th>
<th>Aquarium Section</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1981</td>
<td>1986</td>
<td>1990</td>
</tr>
<tr>
<td></td>
<td>US Dollars</td>
<td>USD</td>
<td>US Dollars</td>
</tr>
<tr>
<td></td>
<td>Mexican Pesos</td>
<td>Mexican Pesos</td>
<td>Mexican Pesos</td>
</tr>
<tr>
<td>Estimated Gross Operating Revenues:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Admissions</td>
<td>$464</td>
<td>$9,276</td>
<td>$947</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>1,239</td>
<td>29,423</td>
<td>3,495</td>
</tr>
<tr>
<td>Merchandise</td>
<td>464</td>
<td>9,276</td>
<td>977</td>
</tr>
<tr>
<td>Games/Arcade</td>
<td>368</td>
<td>6,957</td>
<td>733</td>
</tr>
<tr>
<td>Aerial Train Ride</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Animal Food</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Rentals</td>
<td>116</td>
<td>2,319</td>
<td>244</td>
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<tr>
<td>Total</td>
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<td>$67,251</td>
<td>$6,596</td>
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<td>Estimated Net Revenue According to Operating Entity:</td>
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<td></td>
</tr>
<tr>
<td>Admissions</td>
<td>$464</td>
<td>$9,276</td>
<td>$947</td>
</tr>
<tr>
<td>Food and Beverage (at 12 percent)</td>
<td>209</td>
<td>4,731</td>
<td>443</td>
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<td>Merchandise (at 15 percent)</td>
<td>70</td>
<td>1,391</td>
<td>147</td>
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<tr>
<td>Games/Arcade (at 20 percent)</td>
<td>70</td>
<td>1,391</td>
<td>147</td>
</tr>
<tr>
<td>Aerial Train Ride (at 20 percent)</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Animal Food</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Rentals</td>
<td>116</td>
<td>2,319</td>
<td>244</td>
</tr>
<tr>
<td>Total</td>
<td>$3,318</td>
<td>$67,251</td>
<td>$6,596</td>
</tr>
</tbody>
</table>

1 Assumes an annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MXN 22.5 = $1 US.
2 Total sales less a 40 percent cost of goods allowance.

Source: Tables 25 and 31, and Harrison Price Company.
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<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions^2</td>
<td>US Dollars</td>
<td>0.20</td>
<td>4</td>
<td>0.31</td>
<td>7</td>
<td>0.46</td>
<td>10</td>
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<td>Food and Beverage</td>
<td>US Dollars</td>
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<td>1.21</td>
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<td>US Dollars</td>
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<td>0.32</td>
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<td>10</td>
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<td>Games/Arcade</td>
<td>US Dollars</td>
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<td>3</td>
<td>0.24</td>
<td>5</td>
<td>0.35</td>
<td>8</td>
</tr>
<tr>
<td>Aerial Tram Ride^2</td>
<td>US Dollars</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Animal Food</td>
<td>US Dollars</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Rentals</td>
<td>US Dollars</td>
<td>0.05</td>
<td>1</td>
<td>0.08</td>
<td>2</td>
<td>0.12</td>
<td>3</td>
</tr>
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<td>Total</td>
<td>US Dollars</td>
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<td>29</td>
<td>5.16</td>
<td>48</td>
<td>5.15</td>
<td>71</td>
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<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions^2</td>
<td>US Dollars</td>
<td>3.95</td>
<td>89</td>
<td>6.33</td>
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<td>59.29</td>
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<td>US Dollars</td>
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<td>6.20</td>
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<td>9.08</td>
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<td>US Dollars</td>
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<td>35</td>
<td>2.50</td>
<td>56</td>
<td>3.65</td>
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<tr>
<td>Games/Arcade</td>
<td>US Dollars</td>
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<td>7</td>
<td>0.48</td>
<td>11</td>
<td>0.71</td>
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<td>Aerial Tram Ride^2</td>
<td>US Dollars</td>
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<td>6</td>
<td>0.40</td>
<td>9</td>
<td>0.58</td>
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<td>US Dollars</td>
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<td>1</td>
<td>0.08</td>
<td>2</td>
<td>0.12</td>
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<tr>
<td>Rentals</td>
<td>US Dollars</td>
<td>0.05</td>
<td>1</td>
<td>0.08</td>
<td>2</td>
<td>0.12</td>
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<tr>
<td>Total</td>
<td>US Dollars</td>
<td>10.00</td>
<td>226</td>
<td>16.05</td>
<td>362</td>
<td>23.55</td>
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---

1 Assumes an annual inflation rate of 10 percent. US dollars converted to local currency at the rate of MN 22.5 = $1 US.
2 Based on admission prices and attendance mix as discussed in the accompanying text.

Source: Harrison Price Company
Table 29

PRELIMINARY ADMINISTRATIVE STAFFING GUIDELINES
FOR THE PROPOSED ATTRACTION

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>State Government Representative</td>
<td>1</td>
</tr>
<tr>
<td>General Manager</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Receptionist</td>
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</tr>
<tr>
<td>Marketing</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Public and Guest Relations</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Merchandise Sales</td>
<td>1</td>
</tr>
<tr>
<td>Manager Group Sales</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Manager, Marketing</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Manager, Public Relations</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerks</td>
<td>2</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Shows/Games/Arcade</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Food and Beverage</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Mechanical Systems</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Electrical Systems</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Water and Plumbing Systems</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Carpentry and Painting</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Landscaping</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Janitorial Services</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
</tr>
<tr>
<td>General Services</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Purchasing</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Personnel</td>
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</tr>
<tr>
<td>Manager, Warehousing</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Wardrobe</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Employee Training</td>
<td>1</td>
</tr>
<tr>
<td>Chief, Security</td>
<td>1</td>
</tr>
<tr>
<td>Chief, Fire Protection</td>
<td>1</td>
</tr>
<tr>
<td>Chief, Public Safety</td>
<td>1</td>
</tr>
<tr>
<td>Assistant Manager, Personnel</td>
<td>1</td>
</tr>
<tr>
<td>Nurse</td>
<td>1</td>
</tr>
<tr>
<td>Seasonal Staff, Personnel</td>
<td>2-5</td>
</tr>
<tr>
<td>Secretary</td>
<td>2</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td>1</td>
</tr>
<tr>
<td>Manager, Accounting</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Payroll</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor, Cash Control</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>2</td>
</tr>
<tr>
<td>Seasonal Staff, Accounting</td>
<td>2-6</td>
</tr>
<tr>
<td>Animal Facilities</td>
<td></td>
</tr>
<tr>
<td>Curator, Mammals</td>
<td>1</td>
</tr>
<tr>
<td>Curator, Fishes</td>
<td>1</td>
</tr>
<tr>
<td>Curator, Birds</td>
<td>1</td>
</tr>
<tr>
<td>Chief, Animal Training</td>
<td>1</td>
</tr>
<tr>
<td>Marine Veterinarian</td>
<td>1</td>
</tr>
<tr>
<td>Total Staff</td>
<td>55-62</td>
</tr>
</tbody>
</table>

Source: Sea World, Inc., and Harrison Price Company.
## Table 24

**PRELIMINARY ESTIMATE OF DEVELOPMENT COSTS**
**FOR THE PROPOSED AQUARIUM ATTRACTION**
(Thousands)

<table>
<thead>
<tr>
<th>Component</th>
<th>US Dollars</th>
<th>Mexican Pesos</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrance Complex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor Service Facilities</td>
<td>$400</td>
<td>$7,200</td>
</tr>
<tr>
<td>Games/Arcade Facility</td>
<td>$50</td>
<td>$900</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$450</td>
<td>$8,100</td>
</tr>
<tr>
<td><strong>Public Park Section</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature Walk</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td>Picnic Area</td>
<td>$100</td>
<td>$1,800</td>
</tr>
<tr>
<td>Children's Playground</td>
<td>$200</td>
<td>$3,600</td>
</tr>
<tr>
<td>Petting Zoo</td>
<td>$75</td>
<td>$1,350</td>
</tr>
<tr>
<td>Amphitheater (1,000 seats @ $300)</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td>Cultural Plaza (10,000 square feet @ $60)</td>
<td>$600</td>
<td>$10,800</td>
</tr>
<tr>
<td>Chinese Junk</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td>Snack Stands (5 at $300)</td>
<td>$150</td>
<td>$2,700</td>
</tr>
<tr>
<td><strong>Restaurant</strong></td>
<td>$600</td>
<td>$10,800</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$2,625</td>
<td>$47,250</td>
</tr>
<tr>
<td><strong>Aquarium Section</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seal Arena</td>
<td>$1,500</td>
<td>$27,000</td>
</tr>
<tr>
<td>Dolphin Arena</td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td>Aquarium - California Reef Tanks</td>
<td>$200</td>
<td>$3,600</td>
</tr>
<tr>
<td>Community Tank</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td>Jewel Tanks (14 at $15,000)</td>
<td>$210</td>
<td>$3,780</td>
</tr>
<tr>
<td><strong>Aquatic Reptile Exhibits</strong></td>
<td>$150</td>
<td>$2,700</td>
</tr>
<tr>
<td>Tide Pools</td>
<td>$250</td>
<td>$4,500</td>
</tr>
<tr>
<td>Seal/Otter Feeding Pool</td>
<td>$600</td>
<td>$10,000</td>
</tr>
<tr>
<td>Dolphin Feeding Pool</td>
<td>$600</td>
<td>$10,000</td>
</tr>
<tr>
<td>Themed Children's Playground</td>
<td>$800</td>
<td>$14,400</td>
</tr>
<tr>
<td>Mini-Stadiums</td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td>Japanese Village</td>
<td>$1,200</td>
<td>$21,600</td>
</tr>
<tr>
<td>Hilltop Complex</td>
<td>$775</td>
<td>$13,050</td>
</tr>
<tr>
<td>Beer-Wine Garden</td>
<td>$800</td>
<td>$14,400</td>
</tr>
<tr>
<td><strong>Snack Stands (2 at $300,000)</strong></td>
<td>$60</td>
<td>$1,080</td>
</tr>
<tr>
<td><strong>Observation Tower</strong></td>
<td>$3,000</td>
<td>$54,000</td>
</tr>
<tr>
<td>Aerial Tramway</td>
<td>$1,500</td>
<td>$27,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$12,945</td>
<td>$233,010</td>
</tr>
<tr>
<td><strong>Beach Restaurant</strong></td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td><strong>Support Facilities</strong></td>
<td>$1,350</td>
<td>$24,300</td>
</tr>
<tr>
<td>Administration and Maintenance Facilities</td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td>Storage</td>
<td>$200</td>
<td>$3,600</td>
</tr>
<tr>
<td>Animal Clinic and Nursery</td>
<td>$100</td>
<td>$1,800</td>
</tr>
<tr>
<td>Animal Food Preparation Facility</td>
<td>$100</td>
<td>$1,800</td>
</tr>
<tr>
<td>Animal Holding Tanks</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td><strong>Avian Facility</strong></td>
<td>$150</td>
<td>$2,700</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$1,350</td>
<td>$24,300</td>
</tr>
<tr>
<td><strong>General Site Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping (20 hectares @ $75,000)</td>
<td>$1,500</td>
<td>$27,000</td>
</tr>
<tr>
<td>Parking (4 acres @ $20,000)</td>
<td>$600</td>
<td>$10,800</td>
</tr>
<tr>
<td>Perimeter Fencing (6,000 feet @ $15)</td>
<td>$90</td>
<td>$1,620</td>
</tr>
<tr>
<td>Grading (200,000 cubic yards @ $1.50)</td>
<td>$300</td>
<td>$5,400</td>
</tr>
<tr>
<td>Roadways, Walkways (160,000 feet @ $0.80)</td>
<td>$130</td>
<td>$2,240</td>
</tr>
<tr>
<td>Pond and Street Construction</td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td><strong>Signing</strong></td>
<td>$100</td>
<td>$1,800</td>
</tr>
<tr>
<td><strong>Sound and Lighting Systems</strong></td>
<td>$500</td>
<td>$9,000</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>$1,500</td>
<td>$27,000</td>
</tr>
<tr>
<td><strong>Sewage Treatment Plant</strong></td>
<td>$350</td>
<td>$6,300</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$5,050</td>
<td>$90,900</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$22,920</td>
<td>$412,560</td>
</tr>
<tr>
<td><strong>Contingency (at 5 percent)</strong></td>
<td>1,146</td>
<td>20,628</td>
</tr>
<tr>
<td><strong>Pre-Opening Expenses (at 5 percent)</strong></td>
<td>1,146</td>
<td>20,628</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>$25,212</td>
<td>$453,816</td>
</tr>
</tbody>
</table>

1 In constant 1979 dollars.
2 US dollar amounts were converted to Mexican pesos at the rate of MN 22.5 = US $1 and reduced across the board by a factor of 20 percent to reflect potential cost savings in Mexico.

Source: Sea World, Inc., and Harrison Price Company.
# Table 23

ANIMAL INVENTORY OF SELECTED AQUARIUM ATTRACTIONS  
1977 - 1978

<table>
<thead>
<tr>
<th>Aquarium</th>
<th>Number of Species Represented</th>
<th>Number of Individual Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mammals</td>
<td>Birds</td>
</tr>
<tr>
<td>Private Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanna Barbera Marineland</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Marineland of Florida</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Marine World/Africa USA</td>
<td>91</td>
<td>17</td>
</tr>
<tr>
<td>Sea Life Park</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Sea World (San Diego)</td>
<td>15</td>
<td>192</td>
</tr>
<tr>
<td>Sea World (Orlando)</td>
<td>13</td>
<td>97</td>
</tr>
<tr>
<td>Public or Quasi-Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Aquarium</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>New York Aquarium</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Seattle Aquarium</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Shedd Aquarium</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

1 Excludes land mammals in the Africa USA section of the park.

<table>
<thead>
<tr>
<th>Aquarium</th>
<th>Size (hectares)</th>
<th>Number of Parking Spaces</th>
<th>Total Annual Attendance (thousands)</th>
<th>Admission Prices (pesos)</th>
<th>Annual Operating Budget (thousands of pesos)</th>
<th>Operating Budget per Attendee (pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanna Barbera Marineland</td>
<td>36.4</td>
<td>2,500</td>
<td>663</td>
<td>134/89/Under 4</td>
<td>na/na</td>
<td></td>
</tr>
<tr>
<td>(Los Angeles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marineland of Florida</td>
<td>22.3</td>
<td>600</td>
<td>600</td>
<td>79/39/Under 7</td>
<td>13,550/23</td>
<td></td>
</tr>
<tr>
<td>(St. Augustine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine World/Africa USA</td>
<td>26.7</td>
<td>1,500</td>
<td>850</td>
<td>156/85/Under 12</td>
<td>146,250/172</td>
<td></td>
</tr>
<tr>
<td>(San Francisco)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea Life Park (Honolulu)</td>
<td>5.3</td>
<td>200</td>
<td>550</td>
<td>89/51/Under 7</td>
<td>29,250/53</td>
<td></td>
</tr>
<tr>
<td>Sea World (San Diego)</td>
<td>34.4</td>
<td>3,800</td>
<td>2,276</td>
<td>146/89/Under 4</td>
<td>315,000/138</td>
<td></td>
</tr>
<tr>
<td>Sea World (Orlando)</td>
<td>50.6</td>
<td>4,000</td>
<td>2,300</td>
<td>152/107/Under 4</td>
<td>562,500/245</td>
<td></td>
</tr>
<tr>
<td>Public or Quasi-Public Operations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New England Aquarium (Boston)</td>
<td>2.0</td>
<td>90</td>
<td>820</td>
<td>79/45/Under 5</td>
<td>49,500/60</td>
<td></td>
</tr>
<tr>
<td>New York Aquarium (New York)</td>
<td>6.1</td>
<td>700</td>
<td>500</td>
<td>45/17/Under 2</td>
<td>22,500/32</td>
<td></td>
</tr>
<tr>
<td>Seattle Aquarium (Seattle)</td>
<td>na</td>
<td>na</td>
<td>550</td>
<td>56/28/Under 6</td>
<td>22,590/41</td>
<td></td>
</tr>
<tr>
<td>Shedd Aquarium (Chicago)</td>
<td>na</td>
<td>2,000</td>
<td>1,067</td>
<td>34/11/Under 6</td>
<td>42,390/40</td>
<td></td>
</tr>
</tbody>
</table>

na means not available.
1 Age limit for free admission.

Source: American Association of Zoological Parks and Aquariums, 1977-78 Directory of Zoos and Aquariums; and Harrison Price Company.
Figure 1
SITE ORIENTATION MAP

KEY TO LEADING HOTELS:
1. Acapulco Princess (745)
2. Puerto Marques (214)
3. Granada Inn (283)
4. Las Brisas (263)
5. Hyatt Regency (695)
6. El Salvador (440)
7. Holiday Inn (282)
8. El Presidente (841)
9. Villa Santa Cruz (82)
10. Acapulco Del Sol (82)
11. Villa Paraiso (62)
12. Casa del Mar (475)
13. Acapulco Continental (46)
14. Radisson Marriott (141)
15. Palacio Marriott (442)
Other good-quality hotels