

As a service to our clients and others, we provide conference presentations, occasional research reports and project reviews on topics of interest which highlight various trends and aspects of our practice. We provide consulting services to clients in the areas of project and plan concept development, business planning, feasibility evaluation and implementation. We specialize in the fields of museums, aquariums and zoos; other visitor attractions and facilities; tourism and resort development; real estate and urban development; and community planning. We welcome your comments.

## ATTRACTIONS PRICING: EXPERIENCE IN AQUARIUM TICKET PRICING

Attractions address ticket pricing decisions throughout their life cycles. These may range from the need to implement an admission fee to strategies to increase ticket prices. In the planning stages for a project, ticket pricing strategies are a basis for estimating attendance versus admission price trade-offs, and thus, facility sizing for new projects. Ticket pricing policies also affect project financial projections and ultimately, a project's viability and sustainability. Ticket prices should be reevaluated for a new project or existing project expansion as an attraction prepares to open. Admission pricing decisions may also be critical for temporary exhibits or attractions. The extent and timing of ticket price increases then becomes an on-going operating issue. For mature attractions, facility expansions add a new layer of complexity to pricing decisions.

Ticket pricing policies for aquariums, and for visitor attractions of all types, are based on a complex set of influences, assumptions and market forces. These include:

- ◆ **The size and scope of the attraction** – Large attractions may have the critical mass to provide new product every few years, which allows for more aggressive admission pricing.
- ◆ **Requirements for earned revenues to fund facility expenses and capital repayment** – Some operators have taken on loans and debt to fund their projects, and this often results in pressure for higher admission prices. The impact of higher admission prices may then limit attendance or

result in turn-aways at the ticket counter.

- ◆ **Type of ownership and operation** – For-profit, non-profit, or government-owned and operated projects will have different needs for admission revenue. In some markets where museums are government-owned or supported there may be a tradition of free admission; initiating an admission fee may be difficult, and might result in a dramatic decrease in attendance.
- ◆ **Explicit tradeoffs between maximizing attendance and/or admission revenue** – There is an admission price/services level/attendance trade-off for most institutions. The establishment of an admission fee or a ticket price increase invariably shuts out some of the potential market.
- ◆ **An institutional mission to maximize attendance** – Many non-profit attraction operators try to minimize admission fees, or search for grant funding to subsidize admission fees in order to maximize attendance and serve their educational missions.
- ◆ **The audience mix of residents and tourists** – Attractions that draw their primary visitorship from tourist markets have more flexibility to increase ticket prices than do those that rely primarily on visitors from resident markets.
- ◆ **The extent of alternative activities in the local area** – These can range from museums to first-run movies, to amusement parks, and their ticket prices. Aggressive ticket pricing in some markets

may lead to the need for more discounting and lower per capita income.

- ◆ **The cost of living in the project area** – For those projects that serve primarily resident markets, sensitivity to local economic conditions is necessary. There is often a “local market price” that may be reflective of local cost-of-living and economic conditions.
- ◆ **The ticket prices for similar attractions nationally** – Because so many people travel and are exposed to attractions, there is a “national” market for various project types. There is often a visitor expectation level for pricing of different types of attractions.
- ◆ **General economic conditions for the country or local area** – Raising admission prices in an economic downturn may be necessary because of already declining attendance and rising costs, but this may lead to even steeper declines in attendance.

Ticket pricing policies at some attractions are based on explicit recognition and analysis of some or all of these factors, while at other attractions, pricing policies are established on a less formalized basis. A review of pricing trends across a particular industry is instructive to individual institutions as they navigate the waters of these complex planning and policy issues.

ConsultEcon, Inc. has tracked ticket pricing trends at visitor attractions, museums, and aquariums for many years. A number of new projects were developed in the early 1990’s that set a new standard for industry pricing. The new aquariums, for the most part, had to cover operating costs through earned revenues – and in some cases, debt for capital expenses as well. These aquariums set a price standard that “pioneered” higher prices for the established aquariums.

In a previous research report, we reviewed the ticket pricing trends for 13 major North American aquariums from 1985 to 2000. Our conclusion was that ticket prices at aquariums were increasing faster than the rate of inflation. This paper reviews the ticket pricing trends and compares it with inflation from 2000 to 2009. Adult

ticket prices were used as the prime indicator for the range of ticket prices offered at aquariums.

As shown by data in **Figure 1** the average adult ticket price for the aquariums reviewed was \$11.92 in 2000 and increased to \$20.79 by 2009. This represents a 74% increase in ticket prices over the decade and an average annual increase of 5.7% as shown by data in **Figure 2**.

**Figure 1**  
Actual Adult Ticket Prices Compared with the “Real” Price of a Ticket in 2000

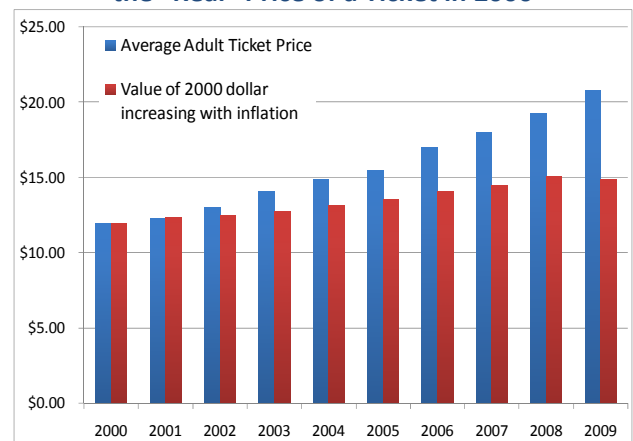


Figure 1 compares the actual adult ticket prices with the price of an adult ticket in 2000 increasing with the rate of inflation. The difference between the two bars on any given year is the “real” increase, in dollars, from 2000 up to that point.

**Figure 2**  
Change in Inflation Compared with Change in Actual Prices

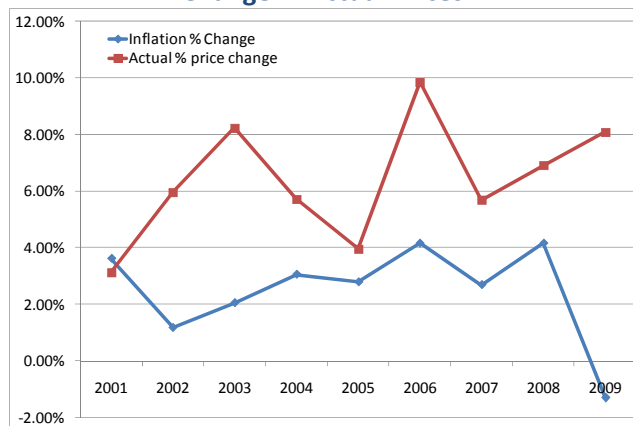


Figure 2 is the percentage change in actual adult ticket prices compared with percentage change in inflation from the previous year. The “real” change in adult ticket prices is the difference between actual price change and the inflation rate.

## Research Report

The Consumer Price Index increased an average of 1.9% annually from 2000 to 2009 (Figure 2). With an average annual increase of ticket prices of 5.7% this indicates a ticket price increase well above the rate of inflation (“real” price increase) of 3.4% annually (Figure 1 & 2). On average, the annual increase in price not attributed to inflation is \$0.62 per year (Figure 3).

Price increases above the inflation rate indicate that the aquarium industry’s price structure has changed. After inflation, the “real” increase in ticket prices was \$5.93 per adult ticket between 2000 and 2009 (Figure 1).

Figure 3

### Dollar Increase in Price Above the Rate of Inflation

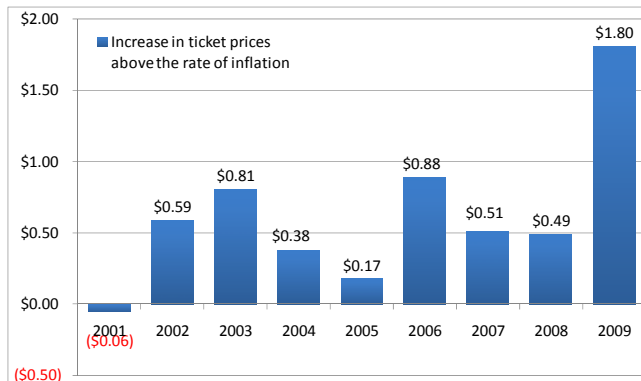


Figure 3 is the “real” dollar amount change in price from the previous year. The nominal dollar amount change less the inflationary dollar change.

### Influences on Ticket Prices

A number of factors, which vary from one institution to another, affect ticket prices. Factors that influenced, to a lesser or greater extent, the pricing policies of the aquariums profiled during the 2000 to 2009 period include:

A number of new projects were developed in the early 1990’s that set a new standard for industry pricing. The new aquariums, for the most part, had to cover operating costs through earned revenues – and in some cases, debt for capital expenses as well. These aquariums set a price standard that “pioneered” higher prices for the established aquariums.

- ◆ The entry of new projects and the increasing popularity of – and attendance at – aquariums in the 1990’s and 2000’s allowed many existing

aquariums to be relatively aggressive in their admission pricing. Even though many aquariums, like other visitor attractions, experienced decreased attendance levels after 2001 due to the economic downturn and the events of September 11th, these same aquariums have experienced more stable attendance patterns in recent years.

- ◆ Substantial increases in ticket prices are often associated with new construction and/or renovations of aquariums. Many of the aquariums made substantial capital investments during the past decade. The aquariums are improving; and the industry is becoming more “upscale”. Product expansion and improvement has been the basis for much of the increase in ticket prices over the past decade.
- ◆ Some aquariums are now bundling general admission tickets with additional features such as large format film show or other previously “sold separately” experiences.
- ◆ Many of these institutions have reported operating cost pressures, particularly wage costs, as the industry is maturing and wage levels for the economy as a whole have increased.
- ◆ Total attendance at these institutions, with some exceptions, either declined or remained fairly stable as admission prices were increased.
- ◆ The mid and late 1990’s were a time of economic expansion, but were followed by a recessionary period in 2001. Price increases reflecting the good times were followed by moderation in price increases in most periods of economic uncertainty.
- ◆ The largest “real” (inflation adjusted) change in ticket prices for the ten year period was surprisingly in 2009. An increase of 8.1% in actual ticket prices combined with a slight decrease in the CPI combined for a ‘real’ increase to consumers of 9.5% from the previous year. In 2009 exceptional price increases occurred at several of the surveyed aquariums because of major additions and packaging of large format films with the basic aquarium ticket.

- ◆ Tickets for many competitive attractions increased dramatically during the late 1990's into the 21st century – probably for many of the same reasons mentioned above. These price increases improved the “relative value” of an aquarium experience, and again, created a basis for price increases at aquariums. 2009 is an exception.

### Implications of Ticketing Policies

Aquariums set their ticket price policies based on a

number of quantitative and qualitative assumptions about how the marketplace will respond. These may be specifically addressed in a formal analysis, or based on intuitive assessment of market conditions and the effects that ticket pricing policies have on the aquarium's attendance, revenue and adherence to institutional missions. A better understanding of the forces that affect achievable ticket prices and explicit analysis of these market and financial factors can optimize an aquarium's – and other visitor attraction's – ticket prices and achieved per capita income.

**ConsultEcon, Inc.** provides services to clients in the areas of project and plan concept development, evaluation and implementation in the fields of Visitor Attractions, and Travel, Tourism and Resort Development.

Our services in the aquarium industry include:

- ◆ **Business Planning** - Plans for existing and new aquariums and other attractions.
- ◆ **Feasibility Studies** – Evaluation of market support and financial feasibility, including sensitivity analysis.
- ◆ **Site Reviews** – Review of proposed site from market and economic development perspective, including such issues as visibility, accessibility and nearby uses.
- ◆ **Alternative Site Selection** - Evaluation of alternative sites for aquariums and attractions.
- ◆ **Operations Evaluation** - Evaluation of management and operations with solutions for both non-profit and commercial operators.
- ◆ **Economic Impacts** - Economic and fiscal impacts of aquariums and attractions.
- ◆ **Project Reviews** - Independent project evaluations for leadership and funders.

- ◆ **Master Plans** - Site and market analysis, operating plans, and sensitivity analysis for single and multiple use sites.
- ◆ **Expansion Plans** - Analysis of potential visitation and operations impacts.
- ◆ **Pre-Opening Planning** - Development of pre-opening plans including timing of staff hires, operating expenses, exhibit programming, animal collections, temporary holding, installation, marketing for opening, and cash flow.
- ◆ **Project Repositioning** – Strategic evaluation of marketing and operations for a project based on those project's unique circumstances and/or related to outside forces, such as an economic recession.
- ◆ **Primary Market Research** - Visitor surveys and focus groups, pricing, and interpretive approach.
- ◆ **Real Estate Evaluations** - Rent, valuation, and feasibility analysis for aquarium, other attractions', retail and food service properties.

#### **ConsultEcon, Inc.**

Economic Research and Management Consultants  
545 Concord Avenue, Suite 210  
Cambridge, MA 02138 U.S.A.

T: +1 617 547 0100

info@consultecon.com

F: +1 617 547 0102

www.consultecon.com

**Research Reports and Conference Presentation Reports are published from time to time by ConsultEcon, Inc. This report is for informational purposes only. Through this report, the publisher is not rendering legal, accounting or investment advice. Reproduction is prohibited without permission of the publisher. ©2009 ConsultEcon, Inc. All rights reserved.**