Theme Park Development Costs: Initial Investment Cost Per First Year Attendee – A Historic Benchmarking Study

Kelly T. Kaak Rosen College of Hospitality Management University of Central Florida

ABSTRACT

There is an industry "rule of thumb" that when planning for the construction of a theme park, developers should anticipate investing \$100 per expected first-year guest. In other words, if the goal is to attract a million paying guests per year, the total investment needs to equal \$100,000,000. This ratio is quite common in the literature, but it has never been investigated formally. This study collected the initial investment costs of 52 parks built in the United States, converted that investment into modern dollars, and then divided that dollar cost by the first-year attendance figures. The overall mean or average among the subject parks was \$109.61 invested per first-year guest. This figure is very close to the industry "rule of thumb" of investing \$100 in construction costs for every desired first-year guest

Keywords: theme park, development costs, attendance

INTRODUCTION

There is an industry "rule of thumb" that when planning for the construction of a theme park, developers should anticipate investing \$100 per expected first-year guest. In other words, if the goal is to attract a million paying guests per year, the total investment needs to equal \$100 million. This ratio is quite common in the literature, but it has never been investigated formally. This information is easily available. Theme parks, as a part of the development approval process, are required to disclose what the expected attendance will be, so that the surrounding infrastructure needs can be expanded to accommodate the growth. Additionally, as part of the pre-opening publicity campaign, the parks frequently cite the attendance figures they are expecting and dwell on the additional tax revenues and spending these tourists will inject into the surrounding economy. Similarly, the cost of the development is frequently distributed via press releases and as part of the financial prospectus. Obtaining the measure is as simple as dividing the total investment cost by the projected first-year attendance.

Background / Literature Review

The study of the finances surrounding theme parks is a relatively selective field. There are just not that many total theme parks in existence and the frequency of their opening is quite limited. Nonetheless, they represent significant investments by their developers and, due to their vast startup costs, they are typically preceded by numerous feasibility studies. The most important factor to determine is the potential attendance for the venture—all other factors (design capacity, revenues and expenses) are dependant on the projected attendance.

A body of literature has developed in this area. The issue of initial investment dollars per anticipated first year guest is not typically singled out for examination (that is the justification for this study) but other financial benchmarks are provided that help a theme park operator anticipate revenues, expenses, and plan for the future expansion/reinvestment needed to ensure repeat attendance over the lifespan of the parks. Harrison "Buzz" Price is the world's foremost authority on performing theme park feasibility studies. He was the individual hired by Walt Disney in 1954 to run the numbers that showed that Disneyland could be successful, ultimately resulting in the funding that was required to bring Walt's dream to reality and usher in the new theme park industry. After performing the feasibility and location studies for Disneyland, Mr. Price went on to perform similar studies for almost every other major theme park built in the past 50 years. His 1999 book, Walt's Revolution by the Numbers, details his experiences. Price demonstrates how to determine approximate attendance based on the surrounding population (market) size, and how to calculate the capacity analysis (how many activities there will need to be and how much space needs to be devoted to each) based on that projected attendance. With this information in hand, he shows how to determine how much should be spent on development. He segments these development costs into: cost per annual attendee (the focus of this study), cost per square foot and cost per acre (1999, p. 229).

Another seminal reference book for the industry is Entertainment Industry Economics. This volume has chapters addressing economic and financial issues in all sectors of the entertainment industry. Chapter 14 presents the "economic outline" of the amusement/theme park sector (Vogel, 2004). Vogel attributes the difficulty in estimating the value of a theme park property to the multiple factors that weigh on its performance: the region in which it is located, weather patterns, the number of days it can operate, local demographics and incomes, and the amount of capital invested (p. 454). At the macro-economic level, Vogel notes that theme park admissions can be positively correlated with consumer credit as a percent of personal income, and negatively correlated with the unemployment rate. Other factors influencing attendance are ticket prices, fuel prices, airline fares, foreign exchange rates, and demographic shifts over time (p. 455). Vogel acknowledges that real estate is the key asset of any park; however, the more typical way of valuing a park property is to use some multiple of EBITDA, adjusting for the age and condition of the park, income/demographic trends in the region, its potential for expansion, its ability to raise prices and/or per capita spending, and its location relative to transportation facilities and other similar destinations (p. 456).

Another large part of the theme park financial literature focuses in on strategies for valuing or appraising theme parks. Since parks are rarely sold, attaching a suitable value to the operations is problematic. Nonetheless, the issue is one of concern for both operators and investors. Hester and Roddewig are professional appraisers and, at length, detail the peculiarities of assessing the worth of theme parks. Much of Hester's analysis explains the distinction between real property and tangible property. Real property is essentially real estate: all land and permanent buildings. Major theme park assets such as the rides are considered to be tangible personal property and should be assessed as such. A building that contains a ride is to be considered real property, assuming that it could still have a use if the ride/attraction was removed (Hester, 1995). Roddewig, Schiltz, & Papke (1986) attempt to distinguish between the concepts of purchase price, sale price, asset value, and operational value when considering the value of a park.

To obtain the raw data for the study (the initial-investment costs, the projected first-year and actual first-year attendance figures) required significant research. A great source of this was the New York Times, which often covered the business dealings of the parks being constructed by major corporations. In the 1970s, a handful of guidebooks were authored that described and located the numerous theme parks that were under construction at that time. In addition to providing the admission prices, a description of the attractions, and directions on how to get there, these books often provided data on attendance and investment costs. These were used as sources for many of the early theme parks built before 1980. Hunter's 1975 book, A Family Guide to Amusement Centers, presents a state-by-state description of numerous attractions of the time. When detailing a theme park, she often mentioned the year it opened and the investment dollars sunk into the venture (Hunter, 1975). Kyriazi provides an account of the early amusement park industry and then in a later section of the book presents detailed information on their successors, the theme parks. His description of the theme parks indicate who built them, when, how much they cost to construct, and what the attendance figures were (Kyriazi, 1976). Another book in this vein is Onosko's Fun Land U.S.A. Much like Hunter, he provides a state-by-state description of the attractions awaiting the theme park visitor at the height of the industry's growth period (Onosko, 1978). To perform the translation of historic invested dollars into modern dollars, the website www.Measuring Worth.com was used. This site provides a conversion tool that enables the user to enter a dollar amount and a year and then computes the "relative value of a U.S. dollar amount" at some future point. For this survey, the historic dollar figures were converted into 2007 dollar amounts, using the CPI (Consumer Price Index) as the means for inflating the currency.

Research Design

The sampling procedure was to collect this information on as many of theme parks as possible. There were some parks for which this information was unattainable; however, the ultimate sample size exceeded 50 percent of the target population at 52 "cases" out of a potential of 75 total theme parks. Some parks posed too many problems when determining initial investment costs to be included. This was due to factors such as the land already being owned by the developer prior to theme park construction; so the

initial investment does not include the land acquisition costs. Several theme parks were amusement parks or themed attractions before they were expanded into theme parks; so the initial investment cost reported only includes the renovation/expansion costs. Then there were some properties that evolved into theme parks over time; so there was not a single, large initial investment in any one year that can be compared against attendance for that same year.

Findings & Analysis

Table 1 – Theme Park Initial Construction Costs per First Year Attendee lists the 52 subject parks, provides the initial construction cost in dollars for the year the park was opened, shows the conversion of the initial construction costs into current dollars (2007), and provides the projected and actual first-year attendance, when available. The final two columns of this table provide the data on which all the subsequent analysis was performed. If data was available on both the "Investment \$ per Projected Guest" and the "Investment \$ per Actual Guest," the later data point was used. If only investment dollars per projected guest was available, this was the data point used in the analysis.

Table 1
Theme Park Initial Construction Costs per First Year Attendee

Theme Park	Year Opened	Year Closed	Initial Construction Cost	In Modern Dollars (2007 Dollars)	Projected 1st Yr. Attendance	Actual 1st Yr. Attendance	Investment \$ per Projected Guest	Investment \$ per Actual Guest
Disneyland (CA)	1955	To Present	\$17,000,000	\$131,621,135	3,120,000	5,200,000	\$42.19	\$25.31
Pacific Ocean Park (CA)	1958	1967	\$10,000,000 *	\$71,695,021	2,500,000	1,200,000	\$28.68	\$59.75
Pleasure Island (MA)	1959	1969	\$4,000,000	\$28,441,975	1,200,000	-	\$23.70	-
Freedomland, U.SA. (NY)	1960	1964	\$16,000,000	\$112,001,080	5,000,000	1,477,296	\$22.40	\$75.81
Six Flags Over Texas (TX)	1961	To Present	\$10,000,000	\$69,298,797	2,000,000	1,200,000	\$34.65	\$57.75
SeaWorld California (CA)	1964	To Present	\$1,500,000	\$10,022,978	-	420,000	-	\$23.86
Universal Studios Hollywood (CA)	1964	To Present	\$4,000,000 *	\$26,727,941	800,000	428,000	\$33.41	\$62.45
Sx Flags Over Georgia (GA)	1967	To Present	\$12,000,000	\$74,494,132	-	1,000,000	-	\$74.49
Dogpatch USA (AR)	1968	1993	\$1,332,000	\$7,936,194	400,000	300,000	\$19.84	\$26.45
Astroworld (TX)	1968	2005	\$20,000,000	\$119,162,069	2,500,000	1,150,000	\$47.66	\$103.62
Marine World (Six Flags' Discovery Kingdom) (CA)	1968	To Present	\$6,000,000	\$35,748,621	1,000,000	-	\$35.75	-
SeaWorld Ohio (Geauga Lake - World of Adventure) (OH)	1970	2007	\$5,500,000	\$29,360,994	550,000	1,100,000	\$53.38	\$26.69
Busch Gardens Houston (TX)	1971	1973	\$11,000,000	\$54,498,495	750,000	-	\$72.66	-
Magic Mountain (CA)	1971	To Present	\$20,000,000	\$102,365,836	1,700,000	1,250,000	\$60.22	\$81.89
Six Flags Over Mid-America (Six Flags St. Louis) (MO)	1971	To Present	\$29,000,000	\$148,430,462	2,000,000	-	\$74.22	-
Magic Kingdom at Walt Disney World (FL)	1971	To Present	\$320,000,000	\$1,637,853,370	8,500,000	10,712,991	\$192.69	\$152.88
Busch Gardens Los Angeles (Van Nuys) (CA)	1972	1976	\$4,400,000 *	\$21,799,398	1,000,000	-	\$21.80	-
Kings Island (OH)	1972	To Present	\$30,000,000 #	\$148,632,258	-	2,001,000	-	\$74.28
Opryland, U.S.A. (TN)	1972	1997	\$25,000,000	\$123,860,215	1,500,000	-	\$82.57	-
Carowinds (NC)	1973	To Present	\$27,000,000	\$125,944,522	1,500,000	1,230,000	\$83.96	\$102.39
SeaWorld Florida (FL)	1973	To Present	\$25,000,000	\$116,615,298	1,000,000	800,000	\$116.62	\$145.77
Orcus World (Boardwalk and Baseball 1987 to 1990) (FL)	1974	1986	\$50,000,000 ~	\$210,158,119	4,000,000	-	\$52.54	-
Marco Polo Park (FL)	1974	1976	\$25,000,000	\$105,079,059	1,400,000	-	\$75.06	-
Great Adventure (Six Flags Great Adventure) (NJ)	1974	To Present	\$50,000,000	\$210,158,119	-	1,200,000	-	\$175.13
Kings Dominion (VA)	1975	To Present	\$50,000,000	\$192,553,863	-	650,000	-	\$296.24
Busch Gardens Williamsburg (The Old Country) (VA)	1975	To Present	\$30,000,000	\$115,532,318	-	1,600,000	-	\$72.21
Great America - Santa Clara (CA)	1976	To Present	\$40,000,000	\$145,656,481	2,500,000	-	\$58.26	-
World of Sid and Marty Krofft (GA)	1976	1976	\$14,000,000	\$50,979,768	-	300,000	-	\$169.93
Great America - Gurnee (Six Flags Great America) (IL)	1976	To Present	\$40,000,000	\$145,656,481	2,500,000	-	\$58.26	-
Libertyland (TN)	1976	2005	\$15,000,000 *	\$54,621,180	450,000	-	\$121.38	-
Canada's Wonderland (Toronto, ON)	1981	To Present	\$116,000,000	\$264,507,555	2,300,000	2,200,000	\$115.00	\$120.23
Epcot at Walt Disney World (FL)	1982	To Present	\$1,200,000,000	\$2,578,346,114	8,000,000	-	\$322.29	-
Six Flags Autoworld (MI)	1984	1986 or '87	\$50,100,000	\$114,239,901	1,000,000	-	\$114.24	-
Kentucky Kingdom (Sx Flags Kentucky Kingdom) (KY)	1987	To Present	\$12,900,000	\$23,544,998	-	240,000	-	\$98.10
Sea World Texas (TX)	1988	To Present	\$155,000,000	\$271,665,342	3,000,000	2,800,000	\$90.56	\$97.02
Disney's Hollywood Studios (Disney-MGM Studios until 2007) (1989	To Present	\$400,000,000	\$668,845,161	4,000,000	8,000,000	\$167.21	\$83.61
Universal Studios Florida (FL)	1990	To Present	\$600,000,000	\$951,837,796	-	5,900,000	-	\$161.33
Fiesta Texas (Sx Flags Fiesta Texas) (TX)	1992	To Present	\$100,000,000	\$147,784,747	2,000,000	1,982,000	\$73.89	\$74.56
Knott's Camp Snoopy (The Park at the Mall of America) (MN)	1992	2008	\$65,000,000	\$96,060,086	1,800,000	1,800,000+	\$53.37	\$53.37
MGM Grand Adventures Theme Park (NV)	1993	2000	\$110,000,000	\$157,838,201	1,600,000	-	\$98.65	-
Elitch's Garden (Six Flags Elitch's Garden) (CO)	1995	To Present	\$90,000,000	\$122,446,063	-	900,000	-	\$136.05
Wild Adventures (Valdosta, GA)	1996	To Present	\$10,000,000	\$12,918,505	310,000	-	\$41.67	-
Disney's Animal Kingdom at Walt Disney World (FL)	1998	To Present	\$800,000,000	\$1,017,629,448	10,000,000	8,600,000	\$101.76	\$118.33
Visionland (Alabama Adventure) (AL)	1998	To Present	\$65,000,000	\$82,682,393	700,000	400,369	\$118.12	\$206.52
Legoland California (CA)	1999	To Present	\$130,000,000	\$161,791,477	1,900,000	1,450,000	\$85.15	\$111.58
Universal's Islands of Adventure (FL)	1999	To Present	\$1,000,000,000	\$1,244,549,820	-	6,000,000	-	\$207.42
Jazzland (Six Flags New Orleans) (LA)	2000	2005	\$138,000,000	\$166,162,578	1,410,000	1,410,000	\$117.85	\$117.85
Discovery Cove (FL)	2000	To Present	\$350,000,000	\$421,426,829	200,000	-	\$2,107.13	-
The Holy Land Experience (FL)	2001	To Present	\$16,000,000	\$18,732,197	200,000	288,000	\$93.66	\$65.04
Disney's California Adventure (CA)	2001	To Present	\$1,400,000,000	\$1,639,067,194	7,000,000	5,000,000	\$234.15	\$327.81
Bonfante Gardens (Gilroy Gardens) (CA)	2001	To Present	\$100,000,000 *	\$117,076,228	750,000	280,000	\$156.10	\$418.13
Hard Rock Park (SO)	2008	? To Present ?	\$400,000,000	\$400,000,000	3,000,000	TBD	\$133.33	

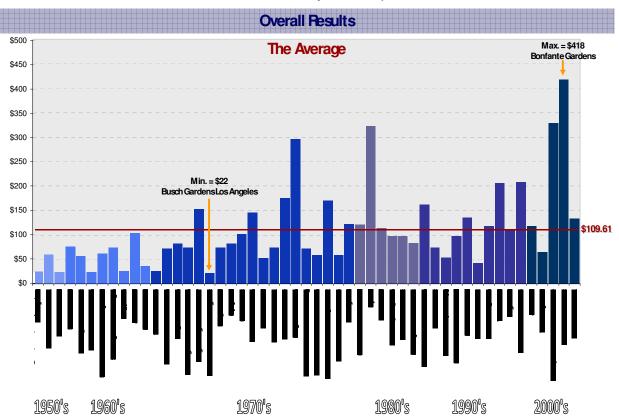
To begin the investigation, simple statistical analysis was performed. minimum investment per first-year guest was \$21.80. This investment was made in 1972 at Busch Gardens Los Angeles - an existing visitor center, bird garden and beer tasting room that was transformed into a theme park by a major capital improvement program and the introduction of a gate with a pay-one-price admission structure. In all honesty, because a "proto-park" already existed at this site, it can be assumed that the initial construction cost under-estimates the true cost of opening this facility. Following the methodology outlined for this study will result in a few cases like this one that do not adequately account for the complete startup costs associated with a park. This is an opportunity to further refine the analysis in continuing studies. Nonetheless, the \$21.80 figure is not an outlier; Pleasure Island, built in the Boston-area in 1959, cost \$23.70 per first-year attendee and SeaWorld California was also opened for only \$23.86 in 1964. Even Disneyland, astonishingly, was constructed in 1955 for only \$25.31 per first-year guest—this is partly attributable to the park exceeding its projected first-year attendance by 67 percent. Due to Disneyland's larger-than-expected attendance, significant dollars were invested into the park during its first few years of operation. In fact, over the park's first ten years of operation another \$50 million was invested, significantly augmenting the \$17 million it took to open the park in 1955 ("Tinker Bell," 1965). This showcases another limitation of this study's methodology—it does not take into account reinvestments made in the parks after the initial construction cost. Industry sources claim that to maintain attendance, parks need to dedicate five to ten percent of their initial construction cost to yearly capital improvement projects (Roddewig, Schiltz and Papke, 1986).

The maximum investment per first-year guest was recorded by Busch Entertainment's Discovery Cove. At \$2,107 per guest, this figure was five times more than the next highest figure; thus it was considered an outlier and was removed from the analysis. (Discovery Cove is a theme park mostly due to the fact that it is operated by the former Busch Entertainment and is included as a part of the SeaWorld Florida resort complex. However, its strategy is to significantly limit the number of guests it receives each day in order to provide exclusivity and ensure a personal experience with wildlife. In return, these limited numbers of guests are charged an admission price that far exceeds the industry average.) The next highest investment per first-year guest was \$418.13 at Bonfante Gardens, which opened in 2001 in Northern California. This park, like Busch Gardens Los Angeles, was built on an existing garden facility; however, that advantage did not enable it to be constructed at a lower-more manageable-cost per first-year attendee. Of course its ultimate challenge was not that it was exceedingly expensive to construct (\$117 million) but that it managed to attract so few guests (only 280,000 its first season—63 percent fewer than projected). The median park was Opryland, which invested \$82.57 per first-year guest when it opened in 1972 in Nashville, Tennessee. There were two modes or most frequently occurring investment amounts: three at approximately \$58 per first-year guest, and three at approximately \$74 per first-year guest.

The overall mean or average among the 51 subject parks was \$109.61 invested per first-year guest. This figure is very close to the industry "rule of thumb" of investing \$100 in construction costs for every desired first-year guest. When

compared to the average, 63 percent of the parks fell below this investment figure and 37 percent of the parks exceeded this investment figure. In terms of actual parks, the average falls between Astroworld (which was built for \$119 million in current dollars back in 1968) and Legoland (which opened in 1999 at a cost of \$162 million in current dollars). Table 2 – Overall Results by Year-Opened displays the 51 parks by year-opened along the x-axis. The y-axis is a dollar scale that reaches to \$500 in \$50 increments. The bar for each park represents its dollar amount invested in initial construction costs divided by its first-year attendance total. The "Min." and "Max." parks are highlighted by the orange arrows, and the overall average has been inserted as a horizontal, maroon-colored line than bisects the bars that exceed the average.

Table 2
Overall Results by Year-Opened



The trend of the investment dollar per first-year attendee has been increasing over time. The average investment per first-year guest for the three parks opened in the 1950s was just \$36.25. Only one of these parks remains in operation and that, of course, is Disneyland. The most likely explanation for why parks were able to invest so little in the first couple of decades of the industry was the absolute novelty of the new parks. No guests had ever been to a theme park, thus they had no expectations of what they would find—anything designated a theme park was enough to bring guests

out. The eight parks opened in the 1960s cost an average of \$57.52—a 59% increase over the average of the prior decade. However, this figure is still low when compared to the overall average. Again, the parks being built in the 1960s were the first in their respective markets; so the guests were still not sophisticated theme park connoisseurs at this point.

Even though the actual investment dollars per first-year guests during these first two decades was below the overall average, it cannot be said that these parks were not well-designed or elaborately themed. The parks built at this time were some of the more innovative parks ever built; many stood the test of time and the major, modern theme park chains constructed their initial parks during these two decades: Disneyland opened in 1955; Six Flags Over Texas opened in 1961 followed by Six Flags Over Georgia in 1967; the first SeaWorld opened in San Diego in 1964; and Universal Studios Hollywood began its tour in 1964. To more definitively show this relationship, Table 3 displays the average investment dollar per first-year attendee by decade.

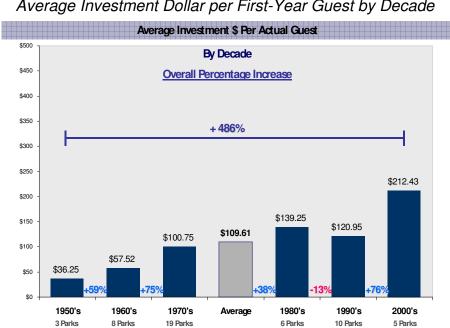


Table 3

Average Investment Dollar per First-Year Guest by Decade

A more likely explanation is that many of the parks built during this period were under-capitalized and under-developed. Many of these parks—including Disneyland—were overwhelmed by crowds during their initial seasons. The guests came but there was not enough for them to do. The parks scrambled to open new attractions as soon as possible to accommodate the unexpected crowds. Those parks that ultimately prospered from this time were those that were in a financial position to make significant capital improvements during their first several years of operation. Those that had no funds available to make the needed improvements or were dominated by investors

demanding immediate returns on their investment were the parks that ultimately failed during this period. Pacific Ocean Park in Santa Monica, California and Freedomland in the Bronx were both designed by teams that had experience with Disneyland. The parks were elaborately themed with one-of-a-kind attractions; however, at the first sign of adversity, their investors chose to eliminate attractions, cut back on the theming and introduce traditional attractions ("An Advertiser," 1962 & Jacques, "Freedomland," 1985). Pleasure Island in Boston was plagued by long-lines, broken-down attractions and complaints by visitors that there was not enough to do ("Even Boston," 1959). None of these parks survived into the 1970s.

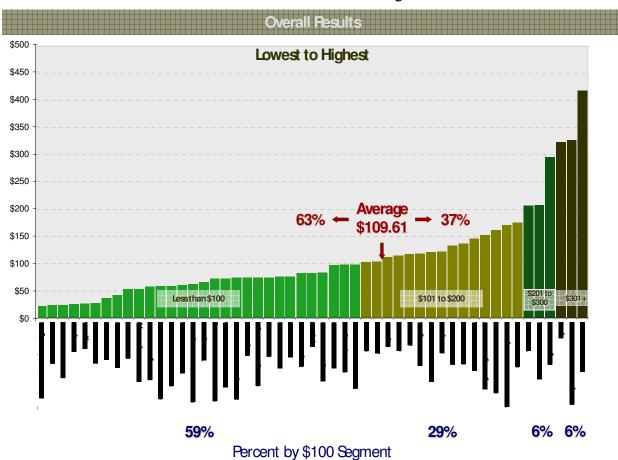
The decade of the 1970s is considered the apex of the theme park development cycle in the United States. Nineteen parks included in this study opened in this decade with an average development cost of \$100.75 per first-year guest—an increase of 75 percent over the 1960s' average. Most major U.S. markets were now within reach of a theme park and guests knew what to expect. The upward trend in theme park development costs continued into the 1980s with six parks included in this study opening at an average cost per first-year guest of \$139.25 (a 38 percent increase from the 1970s' average). In 1982, Walt Disney World's second park Epcot opened at a cost of \$2,578,000,000 in current dollars. Even though its projected first-year attendance was eight million guests, its overall cost per first-year guest equaled \$322.29, the third highest park in the study. Its impact on the study results inflated the overall average for the 1980s.

Evidence of the Epcot impact continues into the results for the 1990s: ten parks included in the study opened during the decade at an overall cost per first-year guest of \$120.95. This figure represents a 13 percent decline over the prior decade—the only decade in the study timeframe that recorded a decline in the average cost of the initial investment per first-year guest. However, the decline in the 1990s was more than made up for by the 76 percent increase seen in the current decade. The five parks included in the study that opened in the 2000s had an average initial investment per first-year quest of \$212.43—almost twice the overall average. More disturbing is that four of these five parks must be considered failures or at least part-failures. Jazzland opened in 2000 in New Orleans and now sits abandoned, a victim of Hurricane Katrina. California Adventure is by no means a failure, but its attendance figures continue to disappoint the Walt Disney Company and a multi-year \$1.1 billion reinvestment campaign is taking place to revive the park (Cain, 2008). Bonfante Gardens resulted in the bankruptcy of its founder and the park has been sold twice. It most recently was acquired by its local government and the plans are for it to continue in operation but on a scale much less than that of a modern theme park (Conrad, 2007). And, the Hard Rock Park opened and closed during its inaugural season. Its diminished actual attendance figures (if they are ever released) will elevate its initial construction cost per actual first-year guest from the projected \$133.33 amount to a figure closer to \$1,000+ per actual guest. This will further increase the overall average for the parks constructed most recently. Like the failed parks mentioned from the first two decades of the study, Hard Rock Park used all its funding just to get open, leaving nothing left for expansion or even marketing. Its overall cost, at \$400 million, might not have been out-of-line, but its inability to attract paying guests certainly inflated its investment to guest ratio and ultimately doomed the venture.

All in all, the average cost per first-year guest has increased almost five times (486 percent) since the beginning of the theme park industry and the current day. Based on the track record of the parks opened in the past decade, the cost of developing a theme park in such a developed market as North America might have reached a point to where they are no longer capable of generating the needed revenues to pay off construction costs, operating costs and the required capital acquisition costs and still provide an adequate return on investment. The secret to obtaining theme park profitability based on the amount invested per first-year guest might be for a prospective park to choose a target figure that best aligns with its economic aspirations. Table 4 displays the same results as the prior overall table (Table 2), only rather than being organized by year, they are displayed from the lowest amount to the highest amount in terms of the initial construction cost per first-year attendee.

Table 4

Overall Results Lowest to Highest



When viewed in this manner, it is quite apparent that the majority of parks (59 percent) were opened at a cost per first-year attendee of less than \$100. Almost a third or 29 percent invested somewhere between \$101 and \$200 dollars, and only a few

invested more than \$200—six percent invested between \$201 and \$300, and six percent invested more than \$300.

Conclusions & Implications

In the final analysis, this study does not arrive at some grand finding, rather it confirms the industry benchmark that when costing and performing the initial feasibility study for a theme park, the "spend \$100 per first-year guest" dictum is an adequate assumption. As Harrison Price—the dean of theme park financial analysts—termed it, this figure provides a "reasonableness test" for any proposed project. It allows for a quick calculation to determine if a proposed venture has a sound basis for potentially achieving success. Actual success will be determined by factors such as location, management competency, the appeal of the theme or design, and the willingness of the venture to reinvest in the park each new season.

The results clearly demonstrate that theme park construction costs per first-year attendee have and continue to increase over time. Yet, increasing investment costs do not assure success. Several of the most recent, spectacular failures have been some of the most expensive (Bonfante Gardens is an example and Hard Rock Park will most likely become the poster child for why not to construct a new theme park). However, several recently constructed parks have been opened at a cost near to the overall average and have gone on to achieve success:

- Disney's Animal Kingdom opened 1998 investment per first-year guest = \$118.33
- Legoland California opened 1999 investment per first-year guest = \$111.58
- The Holy Land Experience opened 2001 investment per first-year guest = \$65.04

These parks can serve as examples of responsible planning and investing for future theme park developers.

Next Steps / Areas for Further Study

While this study looked at what were the actual costs of building theme parks based on first-year attendance, a more refined analysis might be to examine the initial construction costs in terms of the "payback" period based on revenues. In other words, there would be value in determining the number of years it would take to pay for the initial construction costs based on the overall per capital spending of the first-year guests. So where this study provides the actual dollar amount invested per first-year guest, the next study could determine spending per guest and determine how many

times a guest would have to visit to payback the initial investment. For example, if it is known that a park invested \$100 per first-year guest, and its overall per cap spending is \$20—it would take five years of visits to pay off the initial construction costs.

A more traditional form of analysis performed when evaluating investments is to calculate the initial costs in terms of the revenue the investment will produce. For example, if a theme park can be built for \$400 million and it generates \$20 million in annual EBITDA or gross revenues, it can be considered to provide investors with a five percent return on their investment. Then it is up to the investors to determine if they are better off investing their capital elsewhere.

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