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Methodology for Feasibility Studies for Waterpark and Waterpark Resorts

H&LA

HOTEL & LEISURE ADVISORS
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Feasibility Study Methodology

- As you listen and watch to this presentation, I encourage you to download the article PDF I wrote for the World Waterpark Association's Development and Expansion Guide entitled Methodology of Waterpark Feasibility Studies. You can make notes as we proceed through the session.

https://hladvisors.com/wp-content/uploads/2020/07/MethodologyforFeasibilityStudies_WWA-Magazine-2019.pdf

Purpose of Feasibility Study

- Purpose
- Necessity
- Scope of assignment
- Who is the client: developer, lender, government, etc.
- Determine financial feasibility
- Analyze plans and designs and make recommendations

Major Components of a Feasibility Study

1. Area, Demographic, and Neighborhood Analysis
2. Site Review
3. Proposed Development Recommendations and Costs
4. Market Analysis
5. Proposed Development Usage and Pricing Analysis
6. Financial Analysis
7. Feasibility Analysis
8. Comparison of Value Created to Projected Costs

Area Review

1. Area, Demographic, and Neighborhood Analysis
 - Population trends
 - # of families with children within driving distance
 - Household growth
 - Household economics
 - Area economics
 - Area transportation

Site Review

2. Site Review

- Drive-time demographics:
 - Indoor waterpark resort: 180 miles
 - Outdoor waterpark: 60 miles
- Site visibility and access
- Amenities/nearby tourist attractions
- Governmental impacts

Demographics Comparison

Ratio of Family Households to Indoor Waterpark Hotel Rooms within 180 Miles of Example City, Wisconsin Dells & Sandusky

	Example	Wisconsin Dells	Sandusky
2020 Est. Family Households, 180-mile radius	4,180,578	4,304,522	6,516,980
Number of Existing and Under-Construction Hotels with Indoor Waterparks	2	35	13
Total Rooms	1,801	10,092	3,591
Family Households per Indoor Waterpark Hotel Room	2,321	427	1,815

Sources: ESRI, Hotel & Leisure Advisors

Demographics Comparison

US and Canada Residents per Outdoor Waterpark by Region			
Region	Number of Waterparks	Population	Residents per Waterpark
Northeast	72	56,111,079	779,321
Midwest	289	68,308,744	236,362
South	294	124,753,948	424,333
West	115	77,993,663	678,206
<u>Canada</u>	<u>34</u>	<u>37,058,856</u>	<u>1,089,966</u>
Total	804	364,226,290	453,018

Source: Hotel & Leisure Advisors, LLC, October 2020

Facility Recommendations

3. Proposed Development Recommendations and Costs for New Development or Expansion

- Physical plant information
- Facility size
- Branding
- Hotel affiliation
- Amenities
- Theme
- Development costs

Market Analysis

4. Market Analysis – Hotel Market

- Hotel competitors
- Existing indoor waterpark resorts
- Demographic analysis
- Recent hotel openings
- Potential hotel openings
- Market segmentation and market penetration
- Projections

Hotel Statistics

Overall U.S. Lodging Performance

	Occupancy	% Change	ADR	% Change	RevPAR	% Change
2015	65.5%	1.7%	\$120.01	4.5%	\$78.63	8.1%
2016	65.4%	-0.2%	\$124.13	3.4%	\$81.15	3.2%
2017	65.9%	0.8%	\$126.72	2.1%	\$83.57	3.0%
2018	66.2%	0.5%	\$129.83	2.4%	\$85.96	2.9%
2019	66.1%	-0.2%	\$131.21	1.0%	\$86.76	0.9%

Source: STR

- Group of 10 indoor waterpark resorts in 2019 achieved 76.4% Occupancy with ADR of \$247.29. Much stronger than average hotel.

Market Analysis

4. Market Analysis – Waterpark Market

- Existing and potential competitors
- Attendance
- Demographics
- Amenities of competitors
- Waterpark pricing

Waterpark Statistics

Top 20 US Waterparks by Annual Attendance

Rank	Park	Location	2019 Attendance	2018 Attendance	% Change over 2018
1	Typhoon Lagoon at Walt Disney World	Orlando, FL	2,248,000	2,271,000	-1.0%
2	Blizzard Beach at Walt Disney World	Orlando, FL	1,983,000	2,003,000	-1.0%
3	Universal's Volcano Bay	Orlando, FL	1,811,000	1,725,000	5.0%
4	Aquatica Orlando	Orlando, FL	1,533,000	1,556,000	-1.5%
5	Schlitterbahn New Braunfels	New Braunfels, TX	996,000	1,016,000	-2.0%
6	Water Country USA	Williamsburg, VA	736,000	729,000	1.0%
7	Adventure Island	Tampa, FL	656,000	669,000	-1.9%
8	Aquatica San Antonio	San Antonio, TX	651,000	645,000	0.9%
9	Schlitterbahn Galveston	Galveston, TX	567,000	559,000	1.4%
10	Splish Splash	Calverton, NY	542,000	539,000	0.6%
11	Six Flags Hurricane Harbor Arlington	Arlington, TX	538,000	533,000	0.9%
12	Six Flags White Water Atlanta	Marietta, GA	526,000	531,000	-0.9%
13	Six Flags Hurricane Harbor	Jackson, NJ	482,000	475,000	1.5%
14	Typhoon Texas	Katy, TX	478,000	451,000	6.0%
15	Six Flags Hurricane Harbor Splashtown	Spring, TX	475,000	475,000*	0.0%
16	Zoombezi Bay	Powell, OH	466,000	438,000	6.4%
17	Six Flags Hurricane Harbor Phoenix	Glendale, AZ	441,000	450,000*	-2.0%
18	Camelbeach	Tannersville, PA	439,000	437,000	0.5%
19	Dollywood's Splash Country	Pigeon Forge, TN	433,000	437,000	-0.9%
20	Cedar Point Shores	Sandusky, OH	424,000	420,000	1.0%

Source: TEA 2019 Theme Index, Global Attractions Attendance Report (released 2020)

Waterpark Statistics

2020 US and Canada Open Waterpark Supply by Region

Outdoor Waterparks			
Region	Municipal	Private	Total
Northeast	15	56	71
Midwest	248	41	289
South	175	118	293
West	68	47	115
Canada	8	26	34
Total	514	288	802

Note: Outdoor Waterpark is defined as an aquatic facility without attached hotel having 3 or more slides.

Indoor Waterpark Resorts			
Region	Franchise	Independent	Total
Northeast	6	11	17
Midwest	33	52	85
South	7	12	19
West	9	3	12
Canada	9	6	15
Total	64	84	148

Note: Indoor Waterpark Resort is defined as a hotel with more than 10,000 square feet of indoor waterpark space.

Standalone Indoor Waterparks			
Region	Municipal	Private	Total
Northeast	1	3	4
Midwest	29	1	30
South	16	3	19
West	40	4	44
Canada	18	3	21
Total	104	14	118

Note: Standalone Indoor Waterpark is defined as being larger than 10,000 square feet with at least three water features.

Resorts with Outdoor Waterparks			
Region	Franchise	Independent	Total
Northeast	0	3	3
Midwest	0	3	3
South	20	27	47
West	15	5	20
Canada	0	3	3
Total	35	41	76

Note: Resort with Outdoor Waterpark is defined as a resort hotel having an outdoor waterpark with at least 3 features (slide, lazy river, wave pool, etc.) excluding resorts that also have indoor waterparks.

Total Number of US and Canadian Waterparks 1,144

Source: Hotel & Leisure Advisors, LLC, September 2020

Waterpark Statistics

- The Midwest boasts the largest number of indoor waterparks.
- The South has the largest number of outdoor waterparks with the Midwest close behind. This region offers few indoor waterparks, indicating potential opportunity.
- The Northeast has the fewest number of outdoor waterparks and the fewest combined resort and standalone indoor waterparks, indicating potential opportunity.
- The majority of outdoor waterparks are municipal due to the Midwest having so many municipal outdoor waterparks.

Usage and Pricing – Indoor Waterpark Resorts

5. Proposed Development Usage and Pricing Analysis – Indoor Waterpark Resorts Occupancy and ADR
 - Demand interviews
 - Hotel and Waterpark demand
 - Day passes
 - Projections
 - Pricing

Usage and Pricing-Outdoor Waterparks

5. Proposed Development Usage and Pricing Analysis – Outdoor Waterparks
 - Usage
 - Facilities
 - Population
 - Projections
 - Pricing
 - Climate

Financial Analysis

6. Financial Analysis

- Estimate the potential gross revenues for the subject property.
- Analyze and project departmental, undistributed, and fixed expenses.
- Project the resultant net operating income over an appropriate holding period.

Discounted Cash Flow

7. Feasibility Analysis: Economic value is calculated through a discounted cash flow (DCF) analysis. Would be applicable for both new construction and an expansion.

Discounted Cash Flow Analysis - As Completed

Proposed Resort

Cash flow at discount rate of 11.0%

	<u>Net Income</u>		<u>P.V. Factor</u>	=	<u>Present Value</u>
2022	\$9,275,000	x	0.9009	=	\$8,355,856
2023	\$9,719,000	x	0.8116	=	\$7,888,158
2024	\$10,230,000	x	0.7312	=	\$7,480,088
2025	\$10,487,000	x	0.6587	=	\$6,908,112
2026	\$10,748,000	x	0.5935	=	\$6,378,415
2027	\$11,019,000	x	0.5346	=	\$5,891,207
2028	\$11,293,000	x	0.4817	=	\$5,439,368
2029	\$11,573,000	x	0.4339	=	\$5,021,831
2030	\$11,866,000	x	0.3909	=	\$4,638,713
2031	\$12,161,000	x	0.3522	=	\$4,282,915
Present value of cash flow					\$62,284,665

Discounted Cash Flow

Sum of cash flows plus the reversionary sale price equals market value

Reversionary benefit	
Net income for 2032	\$12,464,000
Divided by reversion overall rate	9.0%
Gross reversion	\$138,488,889
Less cost of sale at 2.0%	\$2,769,778
Net reversion	\$135,719,111
Value per room	\$542,876
Present value of reversion	\$47,798,164
Market Value	
PV from cash flow	\$62,284,665
PV from reversion	\$47,798,164
Market value as of 1/1/2022	\$110,082,829
Rounded market value	\$110,100,000
Valuation factors	
Price per room	\$440,400
% of value from cash flow	56.6%
% of value from reversion	43.4%

Valuation to Costs

8. Comparison of Value Created to Projected Costs

- Is the new development or expansion justified?
- If new development: How does valuation through a DCF analysis compare with proposed development budget including entrepreneurial profit?
- If an expansion, perform a DCF analysis both with and without the expansion and compare the difference in valuations with the cost of the expansion
- Need to request municipal incentives?

COVID-19 Impact on Waterparks

- COVID-19
 - 2020 brought at least temporary closures of most waterparks nationwide in response to COVID-19.
 - Many properties forced to reopen with reduced capacities, adherence to government requirements, and reluctant consumers
 - Fallout will be felt industry-wide through 2021
 - H&LA estimates \$2.9 billion in lost revenue and 57.5 million in lost attendance for all waterpark properties in the United States between March and August 2020.

COVID-19 Impact on Waterparks

- Recovery from COVID-19
 - Demand should recover in 2022 and 2023
 - Projects that open in 2022 and 2023 will benefit from pent-up demand of consumers who have missed out visiting waterparks and attractions in the past two years
 - See article: <https://hladvisors.com/covid-19-impact-on-u-s-waterpark-industry/>

Conclusion

- Both private developers and municipalities continue to introduce new indoor and outdoor waterparks across the U.S. and internationally.
- The development of an outdoor waterpark is less expensive than an indoor waterpark and can add seasonal recreation to a property.
- Waterpark designers continue to develop exciting new rides and attractions.
- Financing remains challenging for waterparks. See article: <https://hladvisors.com/waterpark-financing-fundamentals/>

Conclusion

- National hotel and waterpark industry is struggling with historic losses in 2020 as a result of COVID-19.
- Many projected openings have been put off until 2021 or later, leaving only those heavily funded and highly anticipated properties, like American Dream's Dreamworks Waterpark in East Rutherford, NJ and the new Kalahari Resort in Round Rock, TX as opening in 2020
- A feasibility study essential to any developer, lender, or investor especially amid so much uncertainty in the industry.
- Feasibility studies take into account current market conditions and offers meaningful recommendations in any economic situation.

DreamWorks Water Park, NJ



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Kalahari Resort, Texas



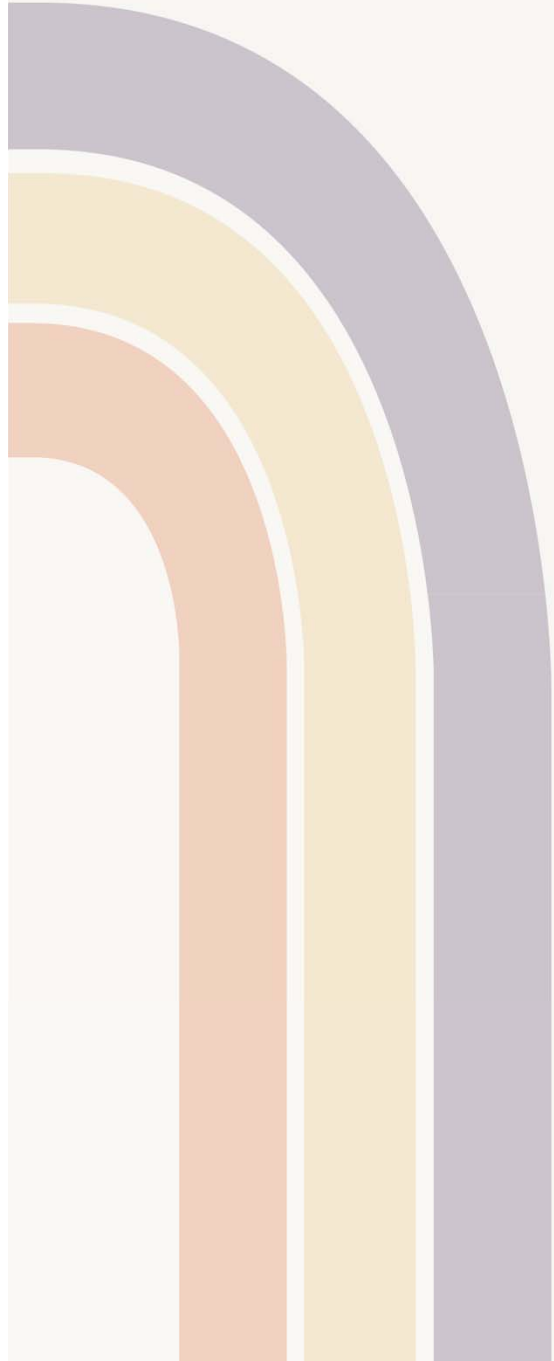
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Questions



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