



WWA University:
**Waterpark Design,
Development,
& Expansion**
Workshop

World Waterpark Association



Methodology for Feasibility Studies for Waterparks and Hotels

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Hotel & Leisure Advisors



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What is a Feasibility Study?

- Purpose
- Necessity
- Scope of assignment
- Who is the client: developer, lender, government, tribal nation, 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



1. Area, Demographic, and Neighborhood Analysis

- Population trends
- Number of families with children within driving distance
- Household growth
- Household economics
- Area economics
- Area transportation



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

Indoor Waterpark Resorts

within 180 Miles of Example, Wisconsin Dells & Sandusky

	Example	Wisconsin Dells	Sandusky
2025 Est. Households, 180-mile radius	5,538,692	6,984,862	10,507,626
Number of Existing and Under-Construction Hotels with Indoor Waterparks	4	31	8
Total Rooms	2,071	9,088	2,762
Total Waterpark SF	441,000	1,357,600	551,000
Households per Waterpark SF	12.6	5.1	19.1

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	70	57,832,935	826,185
Midwest	315	69,596,584	220,942
South	309	132,665,693	429,339
West	119	80,015,776	672,401
<u>Canada</u>	<u>33</u>	<u>41,465,298</u>	<u>1,256,524</u>
Total	846	381,576,286	451,036

Source: Hotel & Leisure Advisors, September 2025

3. Proposed Development Recommendations and Costs

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



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

Overall U.S. Lodging Performance						
Year	Occupancy		ADR		RevPAR	
	Percent	% Change	Per Room	% Change	Per Room	% Change
2015	65.1%	1.5%	\$120.87	4.4%	\$78.73	6.0%
2016	65.2%	0.1%	\$124.53	3.0%	\$81.24	3.2%
2017	65.7%	0.7%	\$127.09	2.1%	\$83.46	2.7%
2018	66.0%	0.5%	\$130.24	2.5%	\$85.94	3.0%
2019	65.8%	-0.3%	\$131.56	1.0%	\$86.58	0.7%
2020	43.9%	-33.3%	\$103.30	-21.5%	\$45.31	-47.7%
2021	57.5%	31.1%	\$124.74	20.8%	\$71.74	58.3%
2022	62.5%	8.7%	\$149.54	19.9%	\$93.53	30.4%
2023	63.0%	0.8%	\$156.17	4.4%	\$98.41	5.2%
2024	63.0%	0.0%	\$159.01	1.8%	\$100.25	1.9%
YTD	62.2%	-0.6%	\$160.12	1.4%	\$99.58	0.8%
2025	62.8%	-0.4%	\$160.91	1.2%	\$101.03	0.8%
2026	62.8%	0.0%	\$162.72	1.1%	\$102.15	1.1%
2027	63.1%	0.5%	\$165.97	2.0%	\$104.70	2.5%
2028	63.1%	0.0%	\$169.63	2.2%	\$107.03	2.2%
2029	63.3%	0.4%	\$172.83	1.9%	\$109.47	2.3%

Source: CoStar U.S. Hospitality National Report, 7/18/2025

A survey of 10 indoor waterpark resorts achieved 76% occupancy with an ADR of \$268.04 in 2024 - much stronger than average hotels.

4. Market Analysis: Waterpark Market

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

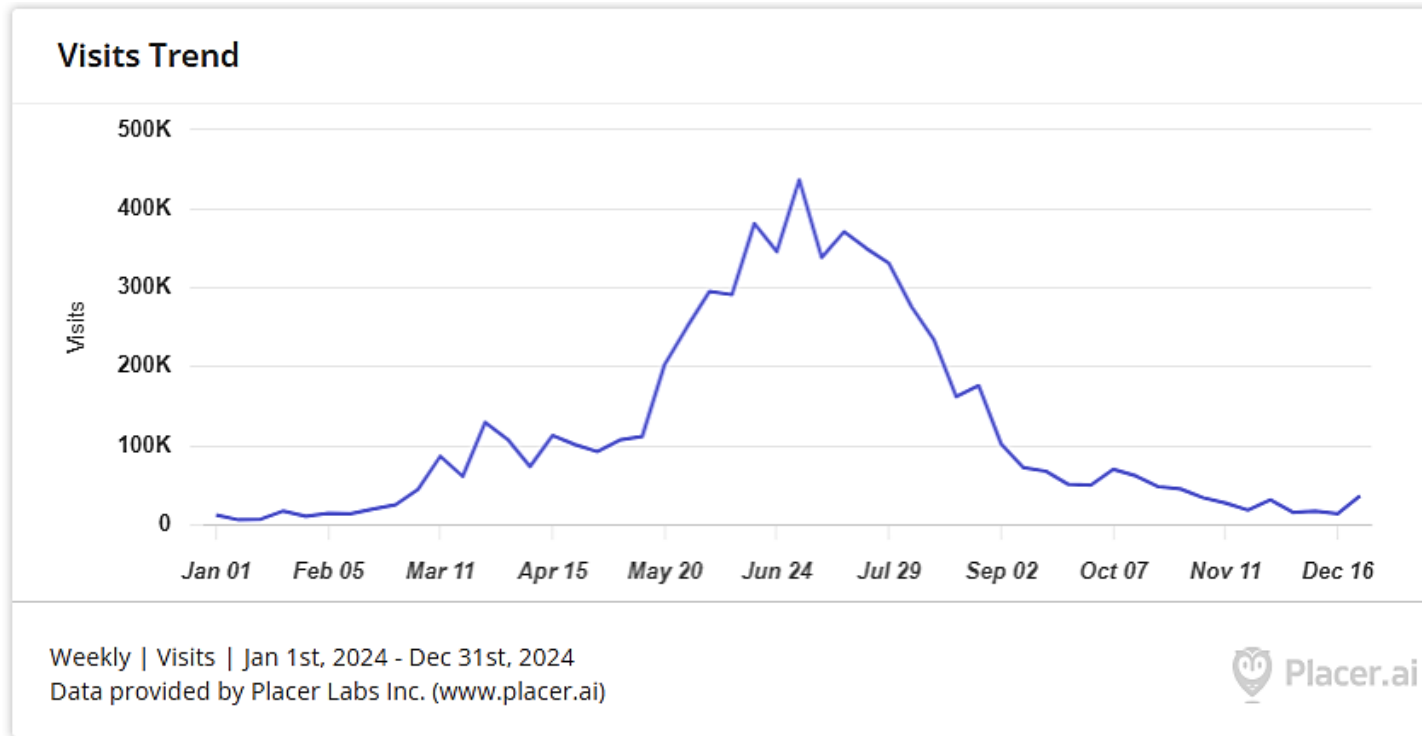


Top US Waterparks by Annual Attendance

Park	Location	% Chg	2023	2022
		2022-2023	Attendance	Attendance
Typhoon Lagoon at Walt Disney World	Orlando, FL	-0.9%	1,898,000	1,915,000
Universal's Volcano Bay	Orlando, FL	-2.7%	1,800,000	1,850,000
Aquatica Orlando	Orlando, FL	-7.2%	1,437,000	1,548,000
Schlitterbahn New Braunfels	New Braunfels, TX	-1.4%	933,000	946,000
Water Country USA	Williamsburg, VA	4.1%	736,000	707,000
Aquatica San Antonio	San Antonio, TX	3.0%	650,000	631,000
Adventure Island	Tampa, FL	0.6%	640,000	636,000
Knott's Soak City	Buena Park, CA	-3.3%	580,000	600,000
Schlitterbahn Galveston	Galveston, TX	0.0%	539,000	539,000
Six Flags Hurricane Harbor Arlington	Arlington, TX	22.7%	476,000	388,000
Six Flags Hurricane Harbor New Jersey	Jackson, NJ	5.6%	450,000	426,000
Six Flags Hurricane Harbor Phoenix	Phoenix, AZ	41.5%	450,000	318,000
Six Flags Hurricane Harbor Los Angeles	Valencia, CA	10.0%	440,000	400,000
Zoombezi Bay	Powell, OH	3.0%	411,000	399,000
Cedar Point Shores	Sandusky, OH	-1.2%	400,000	405,000
Dollywood's Splash Country	Pigeon Forge, TN	3.0%	379,000	368,000
Six Flags White Water Atlanta	Marietta, GA	6.6%	373,000	350,000
Camelbeach	Tannersville, PA	-1.9%	366,000	373,000
Typhoon Texas	Katy, TX	-1.9%	357,000	364,000
		Total	13,315,000	13,163,000

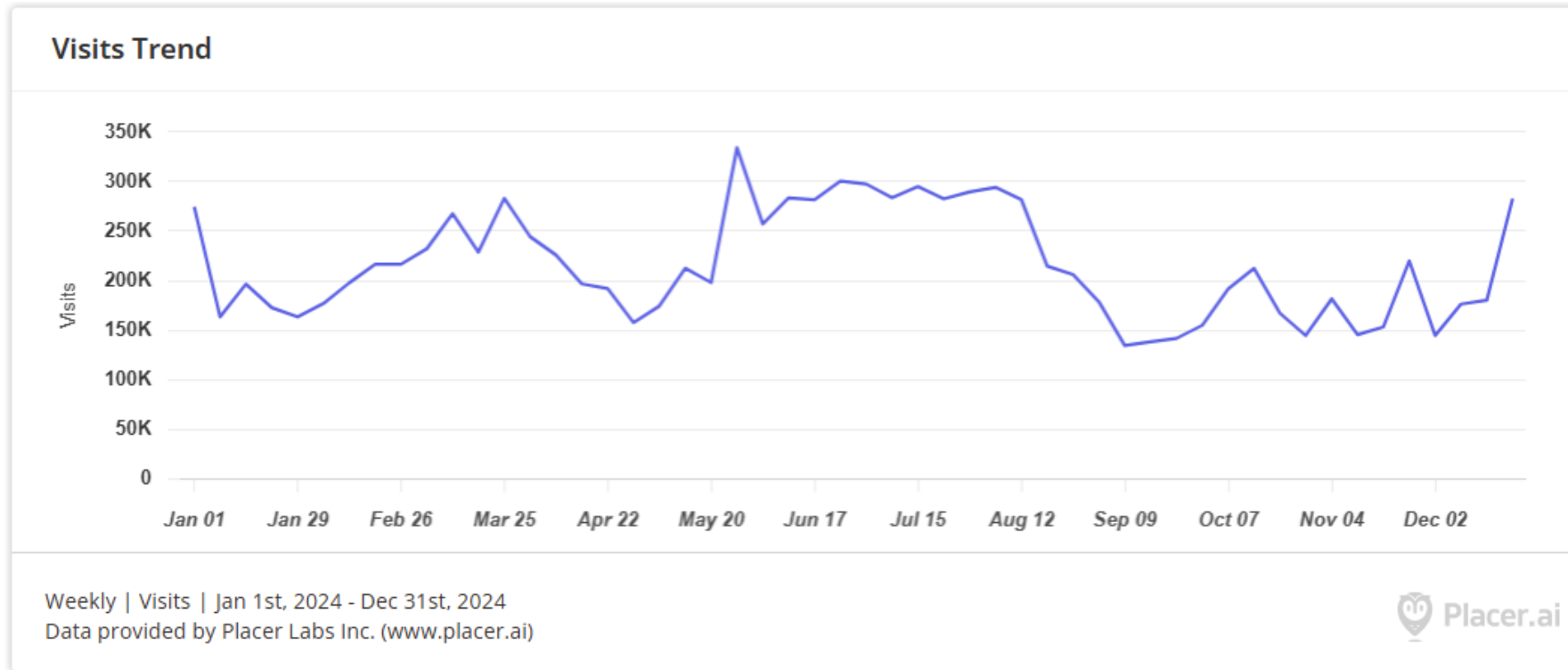
Source: TEA Theme Index, Global Attractions Attendance Report 2023 (released 2024)

Weekly Visitation for Top Outdoor Waterparks



These outdoor waterparks achieved the strongest attendance during the summer months.

Weekly Visitation for Top Indoor Waterpark Resorts



These indoor waterpark resort venues experienced peak demand in summer and during school breaks.

2025 US & Canada Outdoor Waterpark Supply by Region

2025 US and Canada Open Waterpark Supply by Region

Outdoor Waterparks			
Region	Municipal/ Non-Profit	Private	Total
Northeast	16	53	69
Midwest	281	34	315
South	196	113	309
West	73	47	120
Canada	9	24	33
Total	575	271	846

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

Source: Hotel & Leisure Advisors, September 2025

2025 US & Canada Indoor Waterpark Resort Supply by Region

2025 US and Canada Open Waterpark Supply by Region

Indoor Waterpark Resorts

Region	Branded	Independent	Total
Northeast	7	11	18
Midwest	30	54	84
South	11	13	24
West	9	6	15
Canada	8	5	13
Total	65	89	154

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

Source: Hotel & Leisure Advisors, September 2025

2025 US & Canada Standalone Indoor Waterpark Supply by Region

2025 US and Canada Open Waterpark Supply by Region

Standalone Indoor Waterparks

Region	Municipal/ Non-Profit	Private	Total
Northeast	2	3	5
Midwest	39	1	40
South	23	3	26
West	50	3	53
Canada	25	2	27
Total	139	12	151

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

Source: Hotel & Leisure Advisors, September 2025

2025 US & Canada Resorts with Outdoor Waterpark Supply by Region

2025 US and Canada Open Waterpark Supply by Region

Resorts with Outdoor Waterparks

Region	Branded	Independent	Total
Northeast	4	7	11
Midwest	5	6	11
South	39	28	67
West	19	7	26
Canada	1	3	4
Total	68	51	119

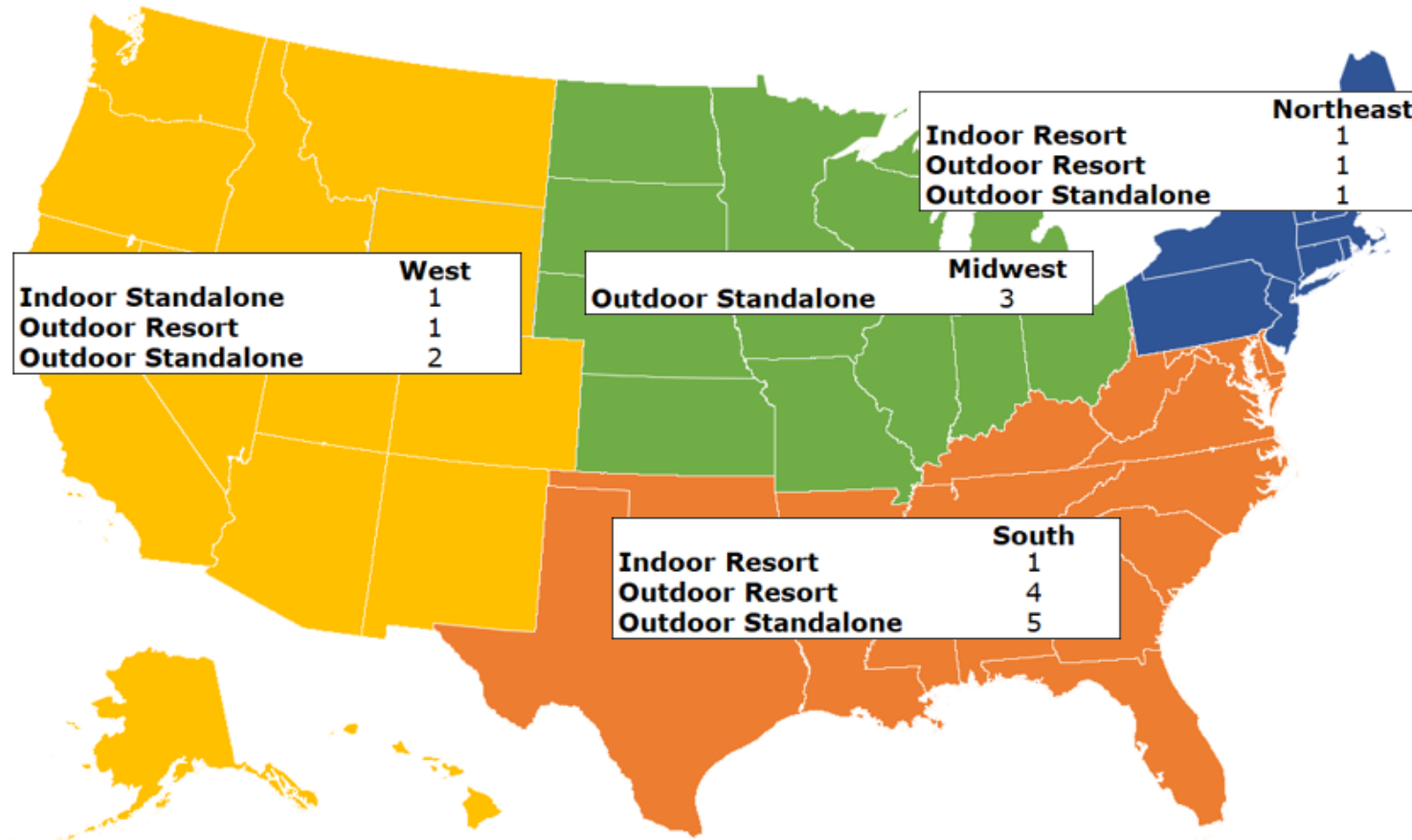
Note: Resort with Outdoor Waterpark is defined as a hotel, campground, or RV resort having an outdoor waterpark with at least 3 features (slide, lazy river, wave pool, etc.) excluding resorts that also have indoor waterparks.

Source: Hotel & Leisure Advisors, September 2025

Waterpark Statistics

- The Midwest represents more than half of the supply of indoor waterpark resorts.
- The Midwest has the most outdoor waterparks followed closely by the South, with the two regions representing nearly three-quarters of the segment.
- Most outdoor waterparks in the United States are municipal/non-profit due to the predominance of municipally operated facilities in the Midwest.
- Despite its population density, the Northeast is the US region with the fewest waterparks, indicating a potential opportunity for developers.

2025 Waterpark Openings by Region



Source: Hotel & Leisure Advisors, September 2025

5. Proposed Development Usage and Pricing Analysis: Indoor Waterpark Resorts Occupancy and ADR

- Demand interviews
- Hotel and Waterpark demand
- Day passes
- Projections
- Pricing



5. Proposed Development Usage and Pricing Analysis: Outdoor Waterparks

- Usage
- Facilities
- Population
- Projections
- Pricing
- Climate



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.



7. Feasibility Analysis

Economic value is calculated through a discounted cash flow analysis.

Discounted Cash Flow Analysis - As Completed					
Proposed Indoor Waterpark Resort					
Cash flow at discount rate of 11.0%					
	<u>Net Income</u>		<u>P.V. Factor</u>	=	<u>Present Value</u>
2026	\$13,602,000	x	0.9009	=	\$12,254,054
2027	\$14,716,000	x	0.8116	=	\$11,943,836
2028	\$15,430,000	x	0.7312	=	\$11,282,283
2029	\$15,893,000	x	0.6587	=	\$10,469,211
2030	\$16,371,000	x	0.5935	=	\$9,715,392
2031	\$16,861,000	x	0.5346	=	\$9,014,579
2032	\$17,366,000	x	0.4817	=	\$8,364,480
2033	\$17,886,000	x	0.4339	=	\$7,761,209
2034	\$18,425,000	x	0.3909	=	\$7,202,789
2035	\$18,977,000	x	0.3522	=	\$6,683,405
	Present value of cash flow				\$94,691,238

Discounted Cash Flow

Sum of cash flows and the reversionary sale price equals market value.

Discounted Cash Flow Analysis - As Completed	
Proposed Indoor Waterpark Resort	
Reversionary benefit	
Net income for 2036	\$19,548,000
Divided by reversion overall rate	9.0%
Gross reversion	\$217,200,000
Less cost of sale at 2.0%	\$4,344,000
Net reversion	\$212,856,000
Value per room	\$608,160
Present value of reversion	\$74,964,579
Market Value	
PV from cash flow	\$94,691,238
PV from reversion	\$74,964,579
Less renovation costs	\$0
Market value as of 1/1/2026	\$169,655,817
Rounded market value	\$169,700,000
Valuation factors	
Price per room	\$484,857
% of value from cash flow	55.8%
% of value from reversion	44.2%

8. Comparison of Value Created to Projected Costs

- Is the development justified?
- How does valuation compare with proposed development budget including entrepreneurial profit?
- Need to request municipal incentives?



Waterpark Resort Challenges

- Smaller properties generally struggle against larger indoor or outdoor properties.
- A few indoor and outdoor waterparks have closed in recent years (ex. multiple CoCo Key Resorts over the years)
- Weather affects outdoor waterpark performance.
- Too much competition can affect performance.

Recent Major Openings

- Great Wolf Resorts opened its Mashantucket, Connecticut resort at Foxwoods Resort Casino, marking the third consecutive year in which the company debuted a new property. The \$300 million resort features 549 rooms and a 92,000-square-foot waterpark.
- The Chickasaw Nation opened the \$400 million OKANA Resort & Indoor Waterpark in Oklahoma City, Oklahoma adjacent to the First Americans Museum. OKANA features 404 rooms, a 100,000-square-foot waterpark, 4.5-acre outdoor lagoon, spa, dining, amphitheater, and conference center. H&LA received a Leading Edge Award for our work on this resort.
- The \$1.3B Gaylord Pacific Resort & Convention Center opened in Chula Vista, California with 1,600 rooms, 477,000 square feet of meeting space, and a 4.25-acre outdoor waterpark featuring waterslides, a lazy river, and a wave pool.



Recent and Upcoming Expansions

- **Bavarian Inn – Frankenmuth, MI** expanded its indoor waterpark by 80,000 square feet, adding more than 20 new attractions. H&LA received a Leading Edge Award for our work on this project.
- **Kalahari Resort – Sandusky OH** completed \$10.5M in upgrades, adding a new slide, two new restaurants, and renovating its lobby.
- **Kalahari Resort – Wisconsin Dells, WI** plans to unveil an \$85M waterpark expansion in Fall 2026. The glass-enclosed, open-air waterpark will feature a retractable roof and will add 75,000 square feet of waterpark space with a variety of new attractions.





Questions?

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Q&A



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