

A large, stylized graphic of a water splash or wave, rendered in light blue and green tones, centered behind the text.

Liseberg Waterpark Update

June, 2019



LDP

Objective Analysis
Creative Thinking

Introduction

Introduction & Disclaimer

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- Leisure Development Partners LLP (LDP) is a leading consulting firm specialised in the feasibility, review and performance improvement of visitor attractions and leisure real estate. LDP's Partners have more than 60 years experience in this niche. The LDP approach relies upon detailed market analysis and the application of carefully chosen real world benchmarks from existing comparable projects. This nuanced approach came out of the original feasibility work for Disney and has been developed further over the past 50 years.
- In 2014 LDP were commissioned by the management team at Liseberg to complete a market and feasibility study for a proposed expansion to Liseberg. A number of options were available but after some deliberation it was agreed that a waterpark as a second gate and accompanying on-site accommodation was the favourite expansion option. LDP completed the study of the potential for the waterpark and 450-room hotel, and also estimated the likely economic impact for such a development.
- Since the original work much progress has been made. As plans have moved forward the management team at Liseberg have asked LDP to review and update our original work to take into account any changes in the market and in consideration of the revised waterpark concept. The Liseberg team have appointed a local hotel consultant to review this part of the development programme and therefore in this document we provide only an update analysis of the planned waterpark.
- **Disclaimer: This Report is based on estimates, assumptions and other information developed by Leisure Development Partners LLP (LDP) from its independent research effort, general knowledge of the industry and other comparable developments elsewhere and publicly available research efforts/surveys. No warranty or representation is made by LDP that any of the projected values or results contained in this Report will actually be achieved. All intellectual property rights in this Report including any forecasts, benchmarks, spreadsheets, tables or other materials provided are the property of LDP. You may use and copy such materials for your own internal use.**

Note that some KPIs and information on comparable parks and waterpark benchmarks have been redacted for confidentiality reasons.



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Site Appraisal

Site Appraisal

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- The table on the following slide shows our site assessment for the Liseberg waterpark site. The matrix is subjective, but aims to assess and score the site according to a number of different criteria relating to leisure potential.
- The matrix scores the site according to fifteen separate criteria, (with 10 being excellent and 1 being poor). We have weighted these criteria according to importance. For instance, access to a significant resident market base and proximity to key tourism hubs are very important for leisure uses, hence the potential.
- As shown, accessibility to major and regional road links, and accessibility to quality public transport all score highly. The quality of the road links are obvious when approaching the site, but we have given the public transport link a very strong score based on the assumption that the proposed West Link railway is developed as planned.
- The impact of having improved direct public transport access to the site will enhance the likely success of the project, and will have a positive impact on market penetration rates across both the resident and tourist markets.
- In the context of other large scale theme parks, the site has relatively modest resident and tourist markets (as we discuss in the markets

section), although the markets are easily accessible given the urban location. The majority of tourist accommodation is in Gothenburg itself and the 0-30 minute resident markets are relatively large as a proportion of the total resident market.

- Access to the site is good in terms of road infrastructure and the proposed new West Link railway will also be a significant boon to residents and tourists living / staying in more central areas of Gothenburg. Clearly there are strong synergies between the existing theme park, the proposed waterpark, and hotel development, and therefore the site scores well in this regard.
- From our perspective there appear to be relatively few man-made features which are likely to impede development or connectivity at the site, and no areas of scientific or ecological importance which would constrain development at the site. We are not aware of any ownership issues.
- Having scored the site according to this range of criteria and weighted these criteria to reflect the concept, we have given the site a score for attraction development of **115** of out a possible **150** - a high score reflecting a strong site.

Site Appraisal

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Site assessment for Liseberg Waterpark

	Weighting	1	2	3	4	5	6	7	8	9	10
1 Accessibility to major road links	1.0								X		
2 Strength of regional road links	1.0								X		
3 Accessibility to major / quality public transport	1.0									X	
4 Access to a significant resident market base	1.5					X					
5 Proximity to tourist markets and accommodation	1.5					X					
6 Size and scale of development / critical mass of entertainment	1.0										X
7 Adjacency of other attractions / developments that drive passing footfall	1.0										X
8 Capacity to develop sufficient on-site parking	1.0							X			
9 Capacity to allow the planned programme and flow between elements	1.0								X		
10 Flatness of site to minimise ground-shaping infrastructure costs	1.0							X			
11 Compatibility of adjacent land uses i.e. not heavy industry	1.5									X	
12 Ownership and ease of purchase negotiations	1.0								X		
13 Image of immediate area and proximity to complimentary uses	0.5									X	
14 Impediment by natural or man-made features e.g. rivers, power lines	0.5						X				
15 Presence of significant scientific, ecological or environmental importance	0.5						X				
Score = 115 out of possible 150 (a strong site)											



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Available Markets

Available Markets

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- The success of any attraction is a function of the scope, scale and nature of the markets there to support it, as well as other external factors, such as levels of competition, disposable income and so forth. These areas are all reviewed in our work and considered in this assessment.
- We have measured the available resident markets based upon travel-time in line with the attractions industry's standard methodology. Many attractions and entertainment centres are unable to draw visits from beyond an hour and many family entertainment centres (FECs) only attract visits from a 30-minute market or less. However, larger scale attractions such as theme parks and amusement parks can draw from up to 120-minutes.
- As such, and for flexibility in our approach, we have sub-divided this market so that our future penetration analysis can take account of diminishing propensity to visit as drive time increases.
- Those people visiting the one hour market area but who live more than two hours from the site are likely to stay in the area overnight and are thus normally considered in the domestic tourist market.
- We consider the international tourist market as those staying overnight within one hour of the site and who reside in another country. In summary, we calculate the following market segments:
 - **Primary resident market**
(those living within 0-60 minutes of the site, subdivided into 0-30 min and 30-60 min markets)
 - **Secondary resident market**
(those living within 60-120 minutes of the site)
 - **Domestic tourists**
(domestic tourists staying in registered accommodation within 0-60 minutes of the site)
 - **International tourists**
(international tourists staying in registered accommodation within 0-60 minutes of the site)
- This is a tried and tested method of analyzing the markets and allows us to compare with like for like benchmarks (for which we have also used drive time assessments to measure the available markets). We use drive times to be able to make reasonable comparisons. In our experience, public transport provides similar or longer travel times once travel to and from the stations, as well as transitions and waiting times are taken into consideration. Attractions are normally very biased towards car / coach but if public transport is particularly strong in a market then this is reflected in our penetration rate analysis shown later in this report.
- The following page shows the drive-time isochrones from the site. As seen, some sections of the 1-2 hour isochrone are naturally foreshortened by the water's edge.

30-, 60-, 120-Minute Drive Times

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Available Resident Markets

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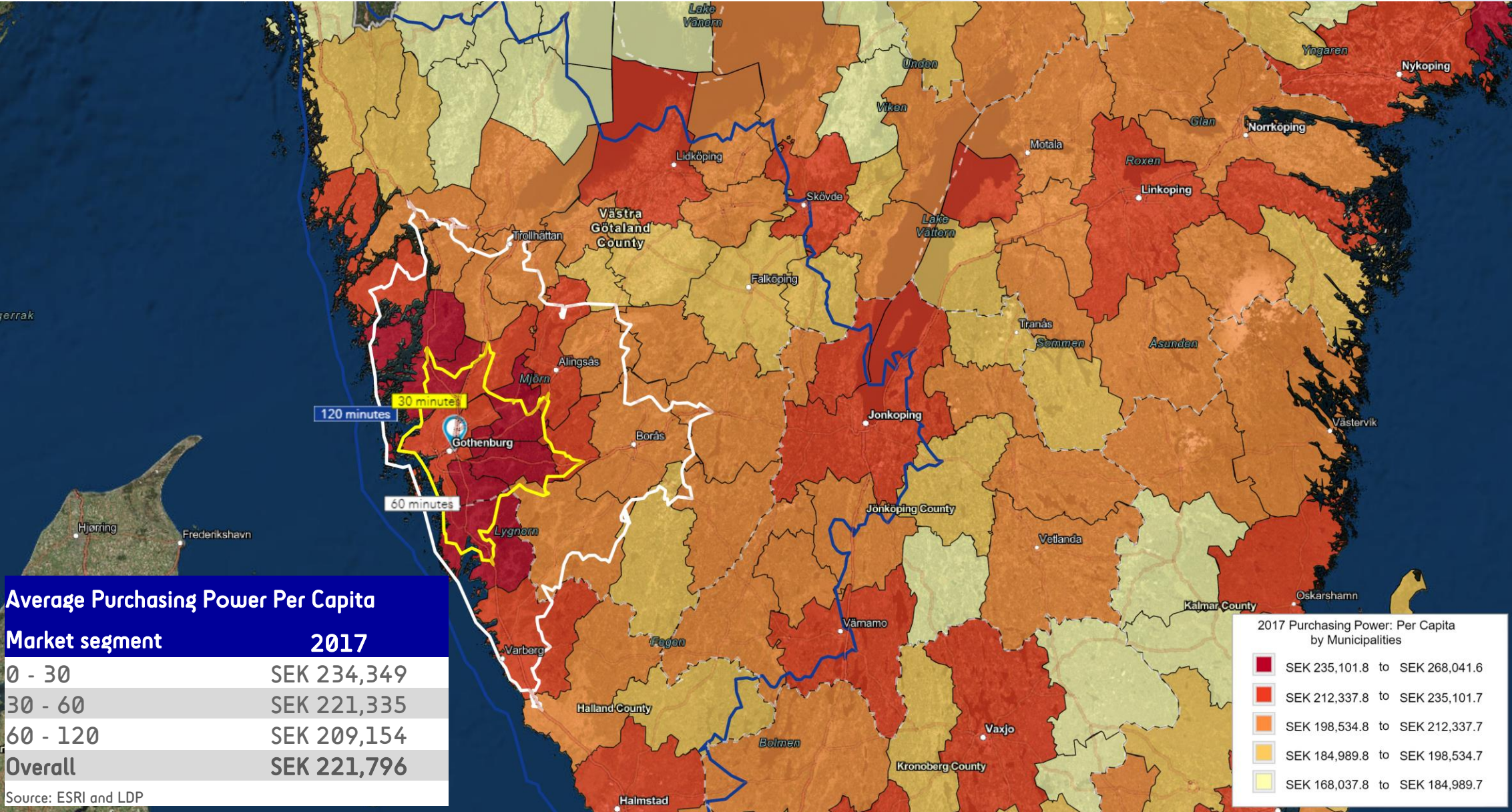
Resident market size [number of people]				
Market segment	2018	2023	2028	CAGR
Primary market				
0 - 30 minutes	851,405	894,176	939,095	0.99%
30 - 60 minutes	447,969	468,092	489,119	0.88%
Total primary market	1,299,374	1,362,267	1,428,213	0.95%
Secondary market				
60 - 120 minutes	829,095	871,007	915,037	0.99%
Total resident market	2,128,469	2,233,274	2,343,250	0.97%

Source: ESRI, Eurostat, Statistics Sweden and LDP

- Shown on the previous page, the 0-30 minute market covers the Gothenburg urban area whilst the 30-60 minute band covers a much wider region, but a space which is relatively sparsely populated. The two hour market reaches all the way south to Helsingborg and north to the border with Norway.
- The total resident market in 2018 is estimated to be 2.13 million, around 61 percent of which is located in the primary market (1.30 million).
- Approximately, 66 percent of the primary market lies in the immediate (0-30) market.
- Using historic data we expect the average annual growth rate of the resident population to be close to 1 percent at 0.97 percent, so by 2028 the resident market will rise to over 2.34 million. The growth rates are expected to be more or less consistent throughout the catchment.
- We know there are some extensive urban plans for Gothenburg and so the growth shown across the near markets may exceed those shown but we have decided to err on the side of caution.

Available Resident Markets

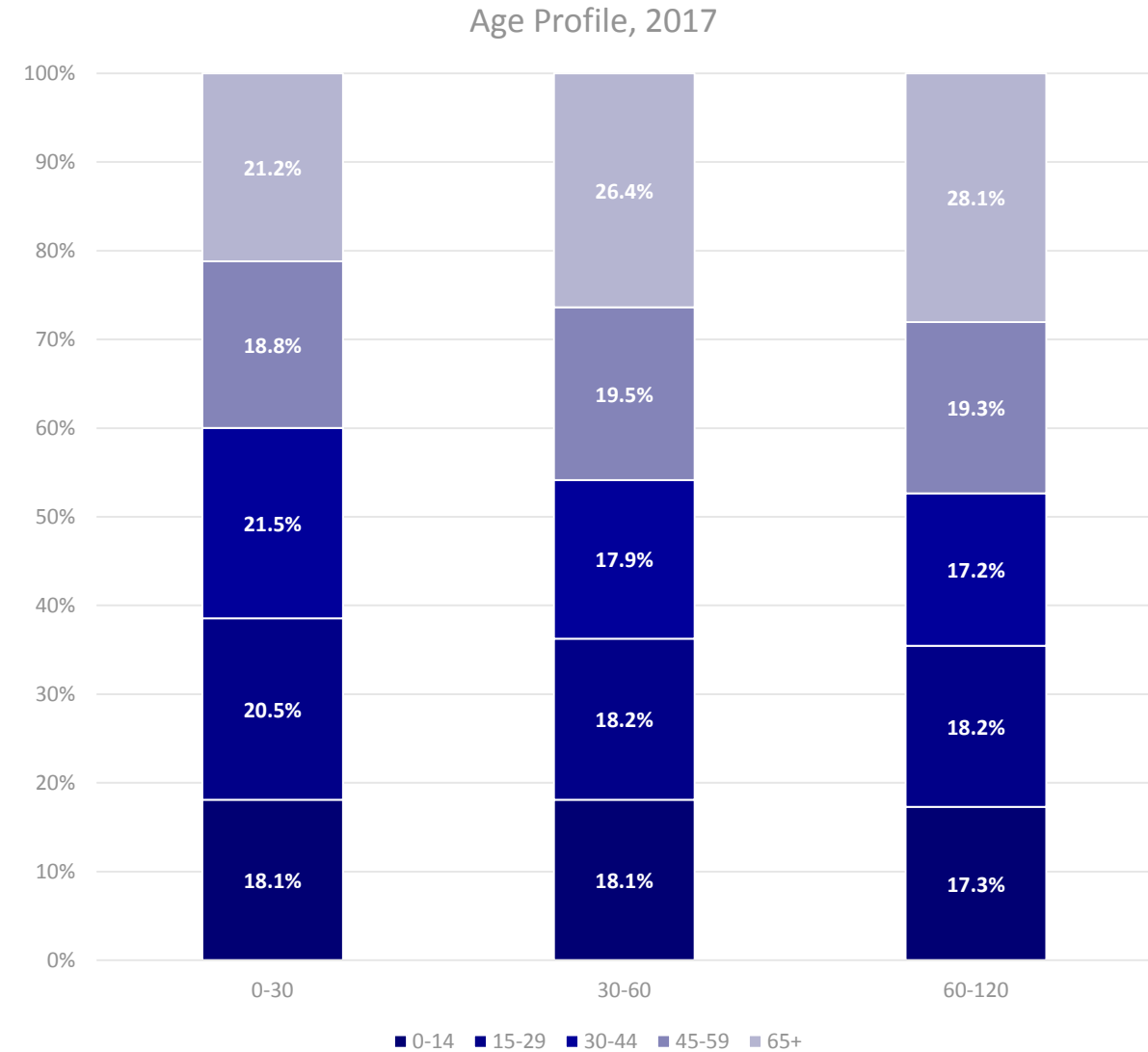
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Available Resident Markets

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- The previous diagram explores the average purchasing power of the catchment population.
- The site is situated in one of the wealthiest parts of Sweden as well as the most affluent area of the region; the 0-30 band registering the highest purchasing power per capita within the catchment at SEK 234,349 (2017), compared to SEK 221,335 and SEK 209,154 of the 30-60 and 60-120 markets respectively.
- The least affluent parts are located on the borders of Norway in the north.
- The graph opposite displays the distribution of five age groupings for each catchment. As characteristic of developed western countries, a movement away from the urban regions of Gothenburg results in the population getting marginally older.
- About 42 percent of the 0-30 population are 15-44 years old, but this falls to 36 percent in the 30-60 and the secondary markets.
- The proportions of the over-45 year olds, however, rises as we move further away from the site location. Increasing from approximately 40 percent of the 0-30 residents, to 47 percent for the rest of the catchment.



Sources: ESRI, and LDP

Available Tourist Markets

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- Based on our experience and patterns observed across the entertainment industry over time, those people visiting the site and who live more than two hours from the site are likely to stay in the area overnight and are therefore considered in the tourist market.
- We have reviewed tourism information from official statistical publications on tourism including Eurostat and Statistics Sweden.

Domestic tourists

- **Qualification:** We normally qualify the domestic tourist market in two ways:
 - Firstly, we exclude the tourists staying overnight within the catchment market area (i.e. within 1-hour drive from the site) who also live within the resident market (i.e. within the 2-hour drive from the site). This step is undertaken to prevent them from being double counted, and missing this step is likely to significantly overstate potential demand.
 - Secondly, most tourism statistics only provide data for hotel guests and exclude those staying with friends and family or other unclassified accommodation. So it is sometimes necessary for us to qualify in these tourists, otherwise potential demand can be understated.

- From Statistic Sweden, we have found data that include both commercial and non-commercial accommodation guests, so we exclude the second form of qualification. But to implement the first form of qualification, we have reduced our unqualified domestic tourist markets by this amount, since the two hour resident market capturing around 20 percent of Swedish residents.

- We have estimated the projected growth rate at 2.7 percent, this is based on the historic growth experienced in domestic tourism.

International tourists

- Historic data is more reliable and we have used historic trends to project these numbers. The predicted growth rate for these tourists is significantly stronger than the rate expected in the domestic market at 3.4 percent.
- On the next page we show the current and projected domestic and international tourist markets.

Available Tourist Markets

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Qualified Tourist Market (number of people)				
Market segment	2018	2023	2028	CAGR
Domestic	3,193,693	3,593,293	4,042,891	2.4%
International	1,275,878	1,511,188	1,789,895	3.4%
Total market	4,469,571	5,104,481	5,832,787	2.7%

CAGR – compound annual growth rate
Sources: Eurostat, Statistics Sweden and LDP

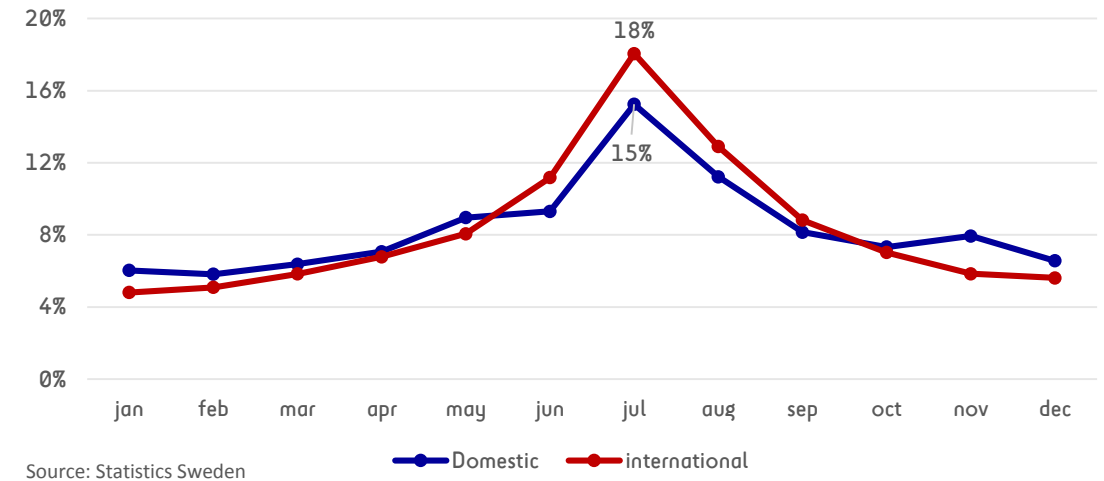
- In 2018, the overall tourist market size within the 0-60 catchment area is estimated to be around 4.47 million.
- The domestic visitors (3.19 million in 2018) are the main source of demand in the tourist industry, covering over 70 percent of the total market, while approximately 1.28 million visitors were from overseas.
- Between 2013 and 2015, the region’s tourist numbers experienced a boom in both domestic and international sub-markets, with foreign visitor numbers growing by at least 20 percent in 2015. We have considered this upsurge, as well as the supply constraints (e.g. rate of hotel building), in our decision to set the annual growth rate at a strong and sustainable 2.7 percent.
- The domestic market is forecasted to grow by just under a million by 2028 at an average annual rate of 2.4 percent.
- While the international market would increase by a slightly faster rate of 3.4 percent and reach close to 1.8 million during the forecasted period.

Available Tourist Markets

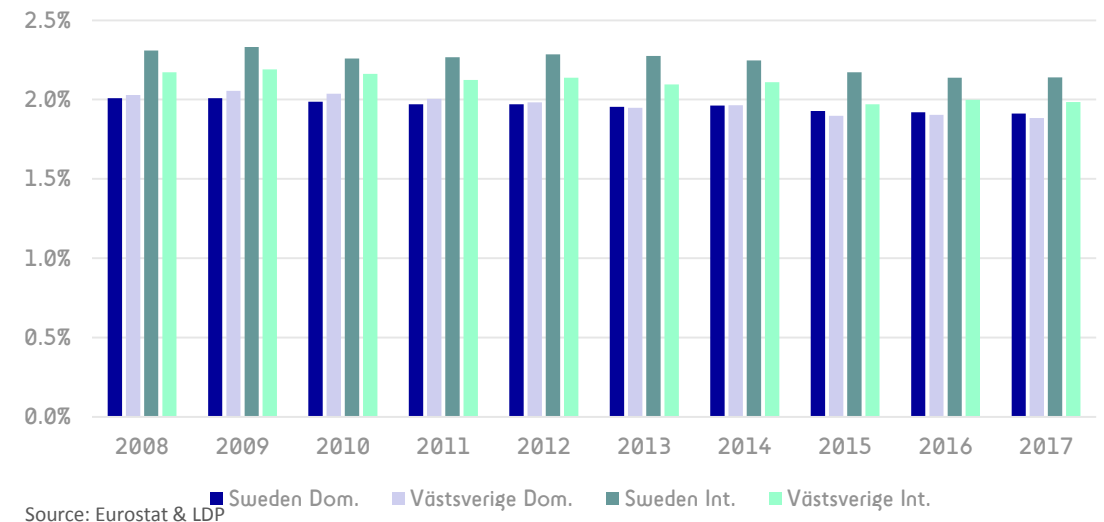
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- The characteristics of the tourist markets are very important in understanding how tourists are likely to behave. In this subsection we investigate the tourist market profiles.
- The chart opposite shows the average seasonality of tourists to the area. Whilst the 0-60 minute drive time covers part of Västra Götaland and Halland county, the area most pertinent to the 0-60 minute primary market is the Greater Gothenburg area. Although the seasonality is quite peaked, with a particularly high proportion of visitors arriving in July, we note that Gothenburg is slightly less seasonal than the surrounding regions and Sweden as a whole. This probably reflects that fact that city breaks are typically less seasonal and the influence of business tourism.
- The seasonality of domestic and international tourists is very similar, with visitation patterns closely tracking each other. July is clearly the busiest month for both domestic and international tourists.
- The bottom chart shows average length of stay of tourists across West Sweden (Västsverige) and Sweden as a whole. On average international tourists stayed 2.0 nights and domestic tourists stay 1.9 nights in West Sweden. Typically international tourists have a longer length of stay but the popularity of shorter city breaks probably brings the average length of stay down. There is a general trend towards shorter stay in both market segments.

Seasonality of tourism to Greater Gothenburg, 2017



Average Length of Stay, nights

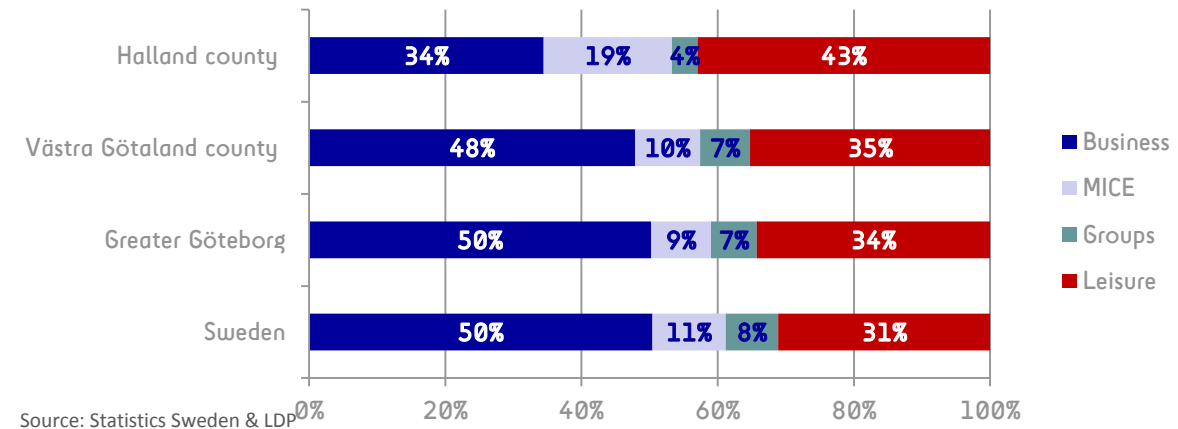


Available Tourist Markets

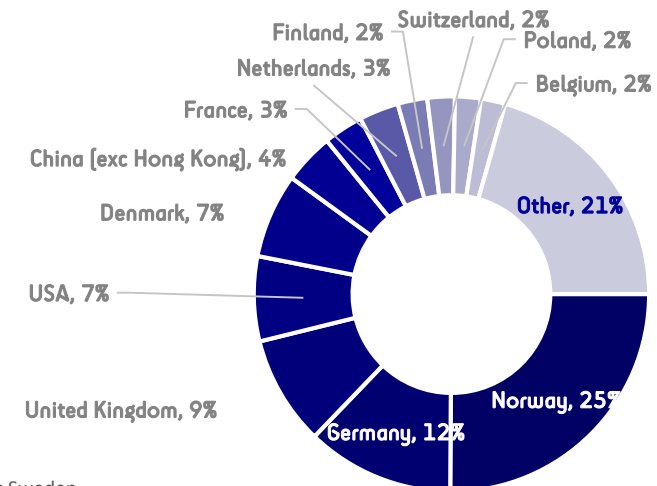
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- The chart opposite shows the purpose of visits of tourists to the various geographic areas. Across the Greater Gothenburg area 34 percent visit for leisure compared to 50 percent business. This is quite a high proportion visiting for business, and these groups are normally considered less likely to visit most of the proposed attractions and facilities, although will be an important source for the accommodation.
- The main purpose of visits fluctuates according to the time of year, with leisure a higher proportion of the total during the peak summer months.
- Domestic tourists to Greater Gothenburg account for over 70 percent of visitors. The key source markets which account for the remaining 30 percent are shown in the chart below.
- Neighbouring Norway easily accounts for the greatest number of international tourists to the Greater Gothenburg area, representing 25 percent. Germany (12 percent), UK (9 percent), USA (7 percent) and Denmark (7 percent) are the other main source markets.
- Notably, the number of nights generated by visitors from China has more than doubled from 2012.

Purpose of visit



Source markets for international visitors to Gothenburg, 2017



Available Tourist Markets – 2014 Comparison

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- **Resident market:** *The markets in these new calculations show a different distribution found in the previous 2014 report. In this case, we find the 0-30 market to be around 250,000 smaller, the 30-60 to be approx. 150,000 larger and the secondary market is greater by over 100,000 than previously expected, as such the total market sizes of the two reports are similar; for 2018 the previous report forecasted a population of 2,119,955 compared to our current estimation of 2,233,274.*
- *These changes are down to a mixture of two factors: different programmes (MapPoint was used in the past rather than ESRI) and a faster population growth than expected in the past 5 years.*
- *We believe that the ESRI calculations has come up with a more accurate market distribution - in our analysis, we have taken extra measures to sense check the numbers, including weighting official county population data from Statistics Sweden.*
- *The market calculation differences are, however, only academic. In our approach to calculating projections, we have implemented the same penetration rate throughout the primary market, and since market sizes are not too dissimilar between the MapPoint and ESRI estimations, the effect of the amendments in the resident markets will cause only minor changes to the final projection compared to the previous results.*
- **Tourist market:** *The changes in this section is centred around the recent boom in the regional tourist industry.*
- *International tourism is significantly higher in the new calculations, following the positive shock in 2015 where number of foreign guests in most accommodation types saw a growth of nearly 22 percent.*
- *The new 2018 estimation for the international tourist market is thus around 1.51 million compared to the forecast of 937,947 in the 2014 report.*
- *For domestic tourists, the differences are marginal and based on updated methods of tourist calculations by the official statistics database.*
- *For both markets we have revised up the expected annual growth rates to reflect the increase in both tourist markets within the past 5 years and the improved outlook in global and Swedish tourism.*



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Competitive Environment

Gothenburg Attractions

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- As part of the analytical approach, we have looked at the competitive environment within the one hour drive time of the site, focusing on nearby area – on the next few pages we present the maps of current selected attractions.
- The list is not exhaustive but helps to provide the context for the project. The primary aim of this map is to show the concentration of entertainment in Gothenburg.
- Overall, there is an abundance of cultural attractions (predominantly museums), several indoor entertainment, such as escape rooms, a VR World, FECs (e.g. Bushuset and Megafun Göteborg) and a laserdome, and a couple of Adventure parks. We have also included a handful of cinemas as these offer a good indication of pricing within a region
- The market, however, despite the inclusion of Liseberg, is clearly lacking large attractions such as a waterpark and high quality branded interactive attractions like indoor activity parks or branded interactive experiences.
- On the right shows the most up to date reported attendances. Whilst many of the museums are not directly comparable to the planned waterpark, the table gives a flavour of the types of attendances achieved in the city.
- Many of the major museums charge very little for admissions which helps to drive strong visitation.

Visits to selected Gothenburg attractions	
	Total visits
Liseberg	3,061,000
Universeum	575,000
Gothenburg Museum of Art	218,378
Natural History Museum	209,530
Gothenburg City Museum	200,718
Museum of World Cultures	162,192
Rohsska [Design] Museum	156,949
Maritime Museum & Aquarium	103,646
Volvo Museum	91,321
Molndals City Museum	62,665
Aerosuem [Aviation Museum]	54,747
Maritiman [Maritime Experience]	34,313
Medical History Museum	6,853
Brewery Museum	3,527

Source: Individual Attractions & LDP

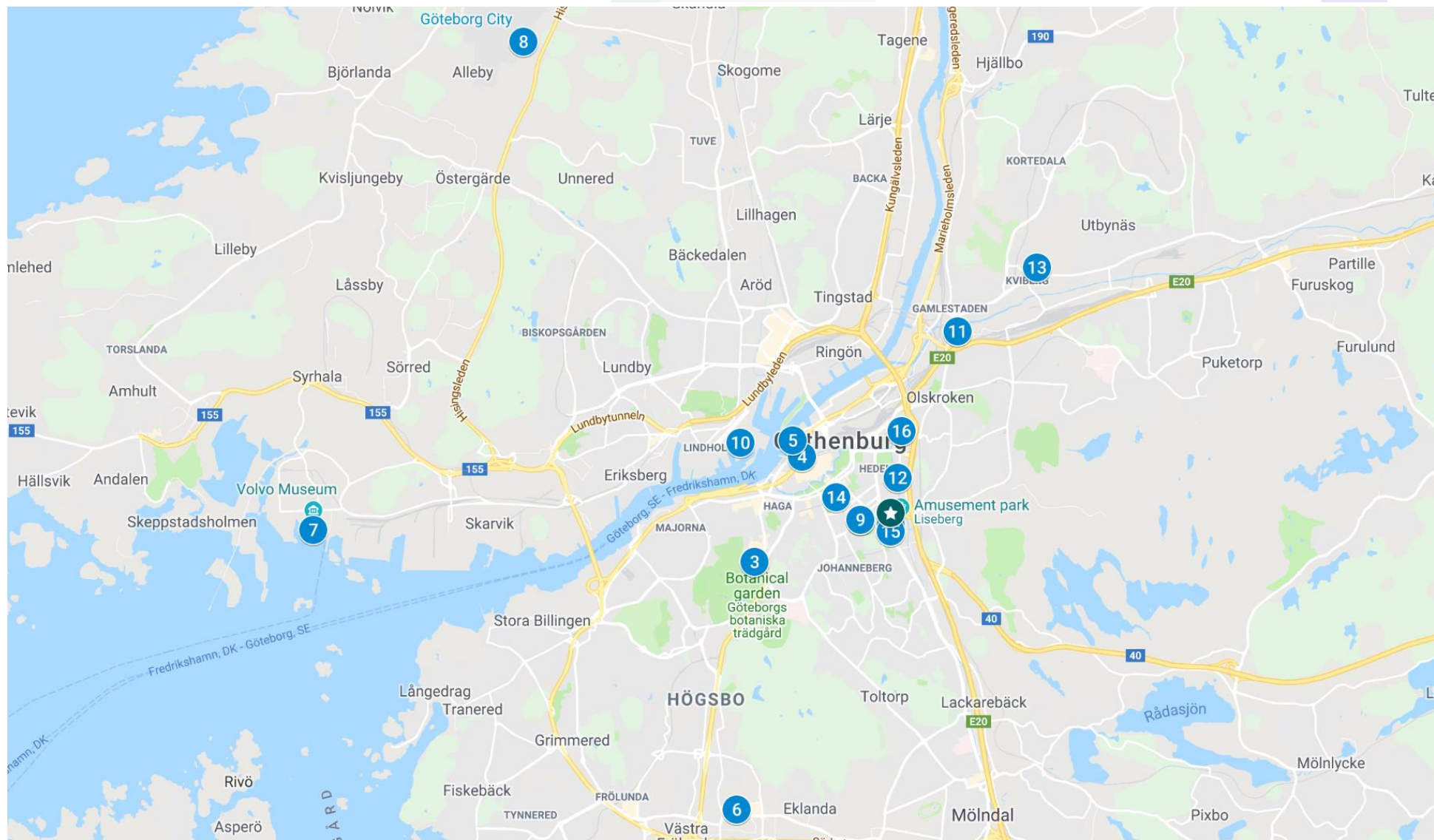
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Gothenburg Attractions - Cultural

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- 1 Universeum
- 2 Gothenburg Artmuseum
- 3 Museum of Natural History
- 4 Gothenburg City Museum
- 5 Maritiman
- 6 Göteborgs Bryggerimuseum
- 7 Volvo Museum
- 8 Aerozeum
- 9 Gothenburg Artmuseum
- 10 Radiomuseet, Göteborg
- 11 Nostalgicum
- 12 Göteborgs Remfabrik
- 13 Idrottsmuseet
- 14 Röhsska museet
- 15 Museum of World Culture
- 16 Spårvägssällskapet RINGLINIEN



Gothenburg Attractions - Activities

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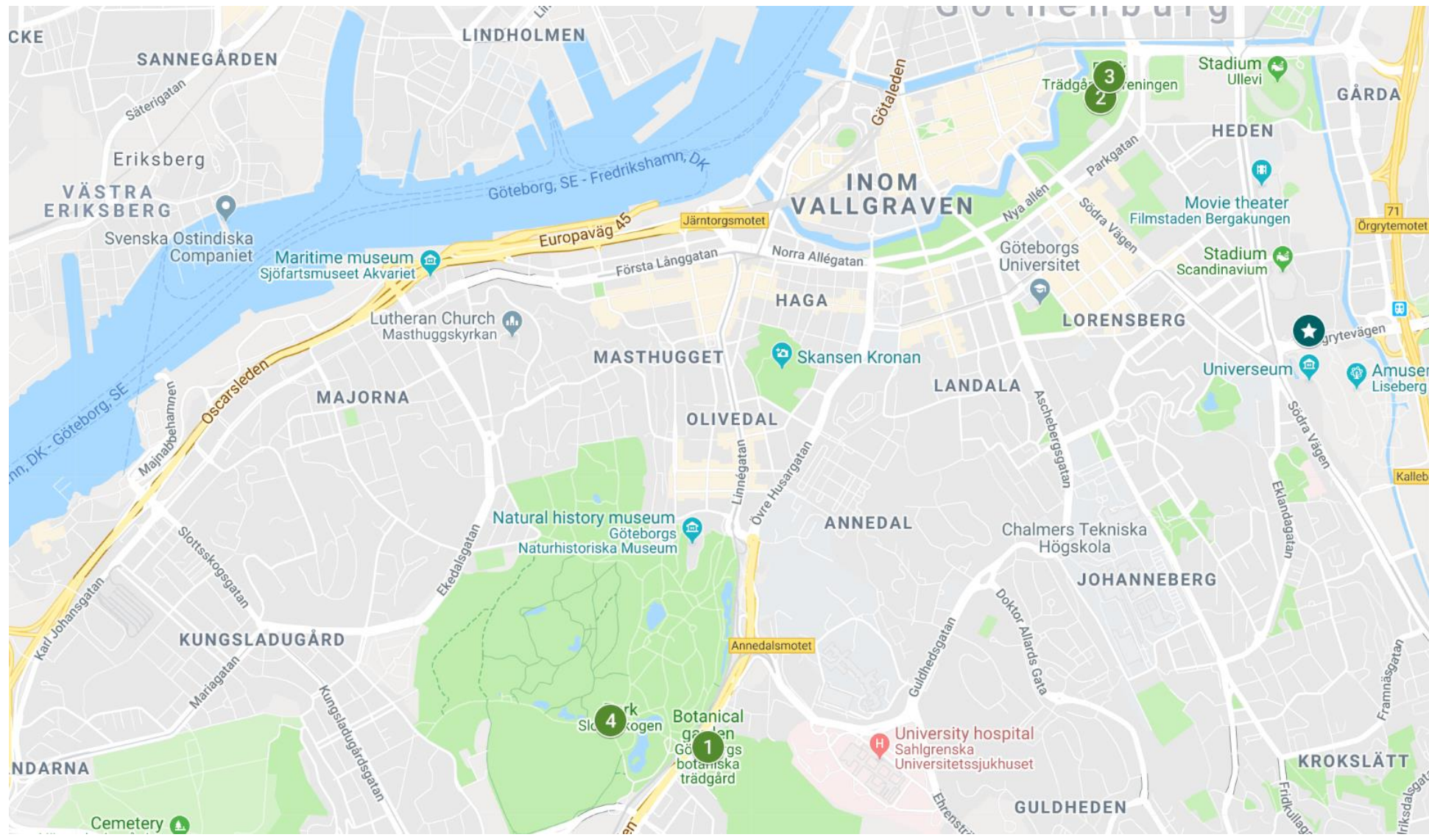
- 1 High Adventure
- 2 Megafun Göteborg
- 3 Buaskogen Adventure AB
- 4 Liseberg
- 5 Filmstaden Bergakungen
- 6 Hagabion
- 7 Bio Roy
- 8 Frölundabion
- 9 Angereds Bio
- 10 The Room Escape
- 11 Escape Quest
- 12 Escape House Gothenburg
- 13 VR World
- 14 laserdome Gothenburg
- 15 Bushuset



Gothenburg Attractions - Animal

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- 1 Gothenburg Botanical Garden
- 2 Palm House
- 3 Horticultural Society
- 4 Slottsskogen

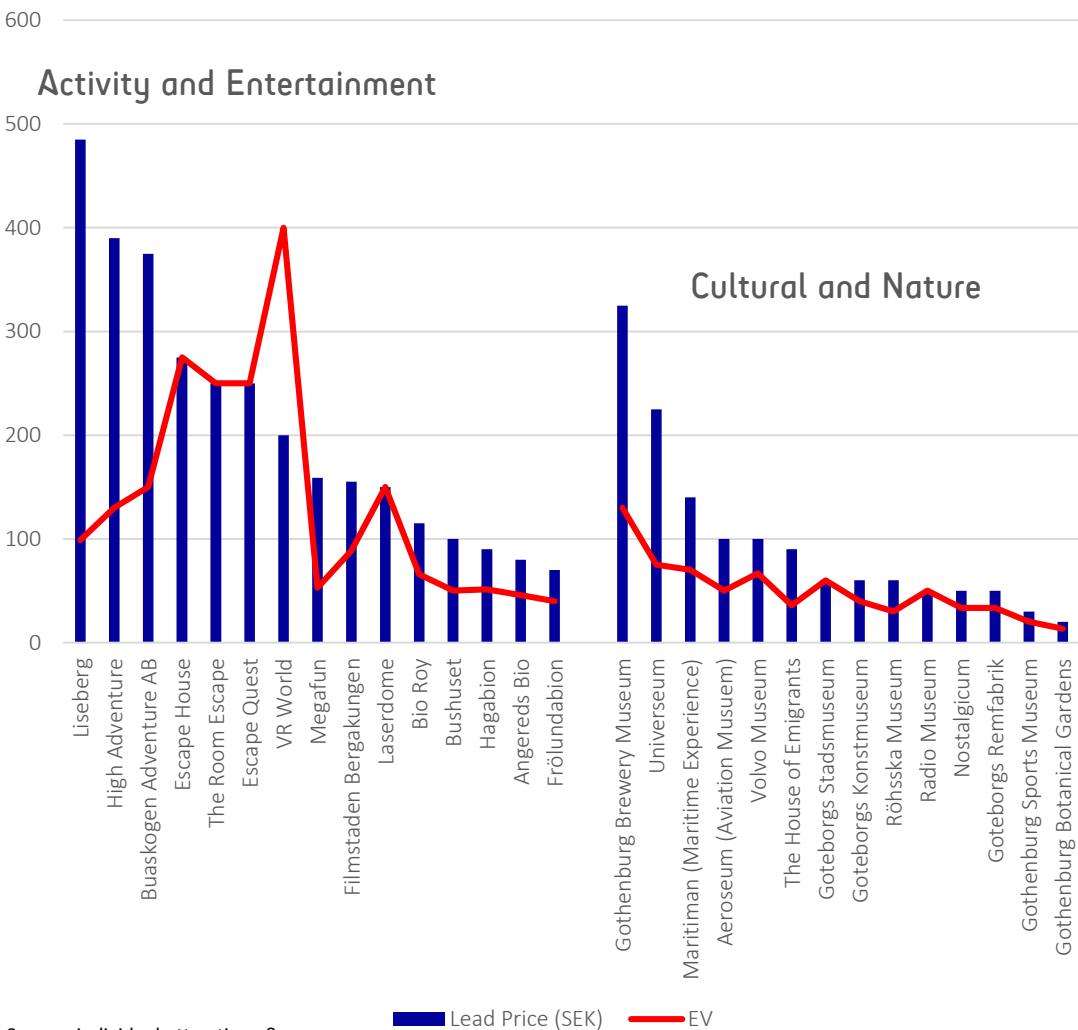


Gothenburg Attractions - EV

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- We have also looked at pricing and Entertainment Value. **Entertainment Value** is the perceived price per hour that consumers are currently spending on entertainment. Although discounts might be available, this is how local markets perceive the value of the experiences. We reviewed the local attractions and pricing to ascertain the current entertainment value in the market area, as shown on the table on the next page. EV is calculated by dividing the **lead price** (i.e. the most expensive price at an attraction – typically adult weekend price although could be child price in children focussed attractions) by an average length of stay among visitors.
- As shown on the righthand side the EV is more or less correlated with the lead price. The **median EV** for our attractions within 1 hour drive time is **SEK 60** and the **average** is at around **SEK 96** (see next page). However, these values are skewed by intense experiences such as VR, escape rooms and adventure parks and therefore a median provides a better representation of the market’s base EV. For this reason we have separated the attractions into two groups: ‘Activity and Entertainment’ (e.g. FECs, theme parks, cinemas and escape rooms) and ‘Cultural and Nature’ (e.g. museums and animal attractions which tend to be subsidised).
- ‘Activity and Entertainment’ attractions have an average EV of SEK 140 and a median of SEK 99 (i.e. Liseberg), while ‘Cultural and Nature’ record an average and median of SEK 51 and SEK 45 respectively, highlighting the different value perceptions the markets have for different types of attractions.

Lead Price & Entertainment Value, 2019



Source: individual attractions & i22

Entertainment value [EV] in Gothenburg and surrounding areas, 2019

Venue	Location	Attraction type [A-Z]	Adult Entry [SEK]	Child Entry [SEK]	Lead price [SEK]	ALOS [hours]	EV
Laserdome	Gothenburg	Activity	150	150	150	1.00	150
High Adventure	Partille	Adventure Park	390	320	390	3.00	130
Megafun	Gothenburg	Adventure Park	99	159	159	3.00	53
Buaskogen Adventure AB	Olsfors	Adventure Park	375	174	375	2.50	150
Liseberg	Gothenburg	Amusement Park	485	475	485	5.57	81
Filmstaden Bergakungen	Gothenburg	Cinema	155	124	155	1.75	89
Hagabion	Gothenburg	Cinema	90	70	90	1.75	51
Bio Roy	Gothenburg	Cinema	115	95	115	1.75	66
Frölundabion	Gothenburg	Cinema	70	50	70	1.75	40
Angereds Bio	Gothenburg	Cinema	80	-	80	1.75	46
The Room Escape	Gothenburg	Escape Room	250	200	250	1.00	250
Escape Quest	Gothenburg	Escape Room	250	220	250	1.00	250
Escape House	Gothenburg	Escape Room	250	275	275	1.00	275
Bushuset	Gothenburg	FEC	-	100	100	2.00	50
Gothenburg Botanical Gardens	Gothenburg	Gardens	20	20	20	1.50	13
Gothenburg Brewery Museum	Gothenburg	Museum	325	-	325	2.50	130
Universeum	Gothenburg	Museum	225	175	225	3.00	75
Maritiman [Maritime Experience]	Gothenburg	Museum	140	80	140	2.00	70
Aeroseum [Aviation Museum]	Gothenburg	Museum	100	50	100	2.00	50
Volvo Museum	Gothenburg	Museum	100	50	100	1.50	67
Goteborgs Stadsmuseum	Gothenburg	Museum	60	-	60	1.00	60
Goteborgs Konstmuseum	Gothenburg	Museum	60	-	60	1.50	40
Radio Museum	Gothenburg	Museum	50	-	50	1.00	50
Nostalgicum	Gothenburg	Museum	50	7	50	1.50	33
Goteborgs Remfabrik	Gothenburg	Museum	50	-	50	1.50	33
The House of Emigrants	Gothenburg	Museum	90	-	90	2.50	36
Gothenburg Sports Museum	Gothenburg	Museum	30	-	30	1.50	20
Röhsska Museum	Gothenburg	Museum	60	-	60	2.00	30
VR World	Gothenburg	Virtual Reality	200	200	200	0.50	400
Average			154.25	149.70	155.31	1.89	96.14
Median			100.00	137.00	100.00	1.75	60.00



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Liseberg Theme Park Performance

Attendance

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- The right-hand side displays the top performing theme and amusement parks in Europe, according to attendances. It displays the attendances for 2018 or the expected numbers (E).
- Liseberg still achieves strong attendance at around 3.06 million visitors per annum (in 2018). This ranks 7th highest in Europe which is an impressive performance when considering the parks that have higher (and indeed lower) attendances and the scale of the markets they sit within.
- Liseberg was also in 7th place in the last report which displayed 2012 attendances.*

Attendance levels at top European Theme & Amusement Park							
#	Park	Location	Attendance	#	Park	Location	Attendance
1	Disneyland Paris	France	9,843,000	22	Heide Park	Germany	1,480,000
2	Europa Park	Germany	5,720,000	23	Movie Park Germany	Germany	1,460,000
3	De Efteling	Netherlands	5,400,000	24	Legoland Deutschland	Germany	1,300,000
4	Walt Disney Studios Park	France	5,298,000	25	Parque de Atracciones [E]	Spain	1,261,000
5	Tivoli Gardens	Denmark	4,850,000	26	Hansa Park [E]	Germany	1,200,000
6	PortAventura	Spain	3,650,000	27	Plopsaland De Panne [E]	Netherlands	1,177,000
7	Liseberg	Sweden	3,055,000	28	Drayton Manor Park [E]	UK	1,160,000
8	Gardaland	Italy	2,900,000	29	Slagharen [E]	Netherlands	1,150,000
9	Legoland Windsor	UK	2,315,000	30	Linnanmaki Amusement Park [E]	Finland	1,000,000
10	Puy du Fou	France	2,305,000	31	Walibi Belgium [E]	Belgium	950,000
11	Legoland Billund	Denmark	2,250,000	32	Walibi Holland [E]	Netherlands	850,000
12	Parque Warner	Spain	2,185,000	33	Bellewaerde [E]	Belgium	750,000
13	Parc Asterix	France	2,174,000	34	Bobbejaanland [E]	Belgium	700,000
14	Alton Towers	UK	2,100,000	35	Tampereen Sarkanniemi	Finland	655,000
15	Legoland Deutschland	Germany	2,250,000	36	Djurs Sommerland [E]	Denmark	620,000
16	Phantasialand	Germany	2,000,000	37	Farup Sommerland [E]	Denmark	602,000
17	Thorpe Park	UK	1,880,000	38	Holiday Park Plopsa [E]	Netherlands	550,000
18	Futuroscope	France	1,850,000	39	Toverland [E]	Netherlands	515,000
19	Grona Lund	Sweden	1,676,000	40	Belantis [E]	Germany	500,000
20	Chessington WoA	UK	1,670,000	41	Walibi Rhone Alps [E]	France	500,000
21	Flamingoland	UK	1,500,000	42	Walibi Sud Ouest [E]	France	293,000

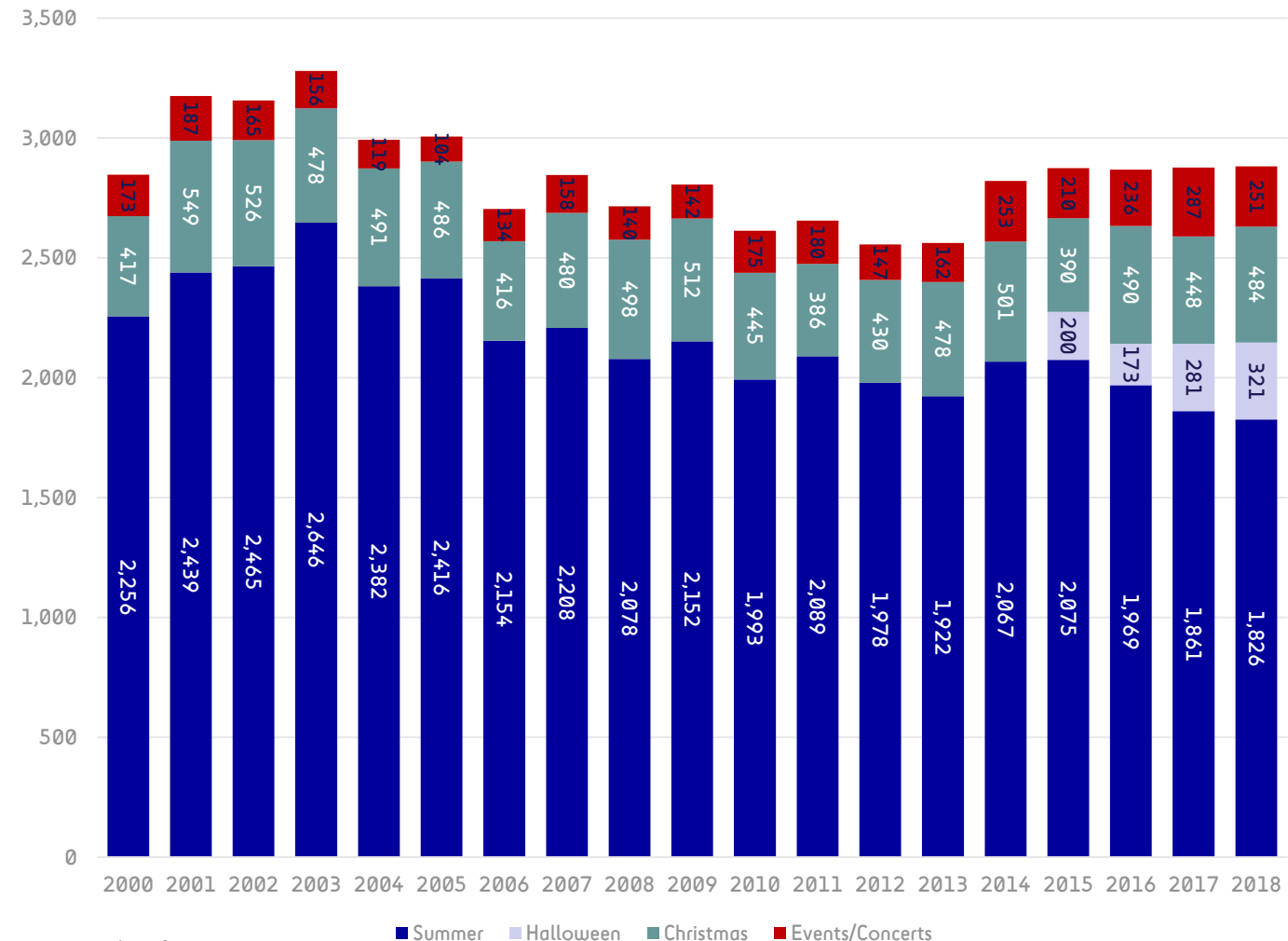
Source: TEA, Individual attractions & LDP, [E]: Expected Attendance

Attendance

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- The chart outlines the change in attendance since 2000, separating the visits into Summer, Halloween and Christmas seasons, as well as the attendance to other events and concerts. The data disregards other non-main park visitors e.g. other restaurants and hotel guests, so will show a lower attendance levels than officially reported.
- In the past four years the attendance has appeared to stabilize at over 2.8 million after a big jump of approximately 260,000 between 2013 and 2014 figures which coincided with the opening of the fastest and longest roller coaster in Scandinavia, Helix.
- The rise in concerts and other events have helped contributed boost in attendance, with these visitors exceeding 200,000 from 2014 onwards.
- Christmas attendance has remained relatively consistent in the past 18 years, averaging at around 470,000.
- The induction of the Halloween season in 2015 has appeared to have increased guest numbers marginally; adding nearly 55,000 between 2014 and 2015. Its main effect has been the reduction in seasonality, as it appears to redistribute the summer numbers (which were previously in the 2 millions but now closer to 1.8 million).

Historical Attendances at Liseberg (000s)



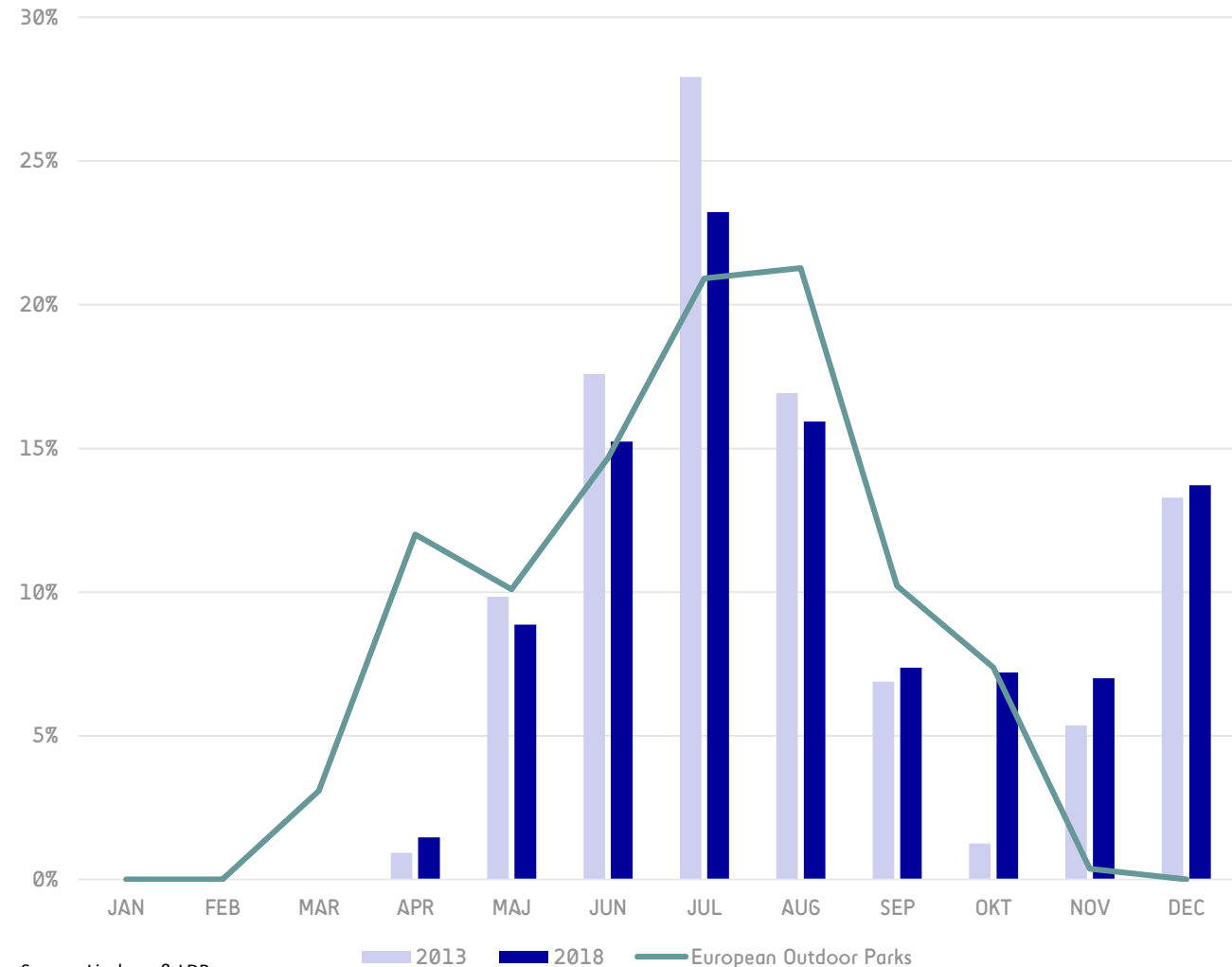
Source: Liseberg & LDP

Seasonality

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- Opposite describes the seasonality of Liseberg guests for 2013 and 2018, as well as the average for European outdoor parks.
- *In our previous report we highlighted the need to manage high seasonality to ease the pressure on the park's capacity during busy periods. In 2014, we found that Liseberg receives between 20,000 and 30,000 people on a busy day in summer suggesting that the park can get fairly crowded, impacting queue times for attractions and the F&B experience.*
- Liseberg is still a highly seasonal park with the peak month (July) reaching around 23 percent (a fall from 28 percent in 2013) of the guests, however this pressure has somewhat been alleviated since 2013 with the introduction of the Halloween Season. From May to August the proportion and number of guests has fallen and redistributed to the less popular months, particularly to October which rose by approx. five percentage points.
- Compared to European outdoor parks, Liseberg's seasonality remains reasonably more accentuated. But, in relation to Scandinavia, many smaller nordic parks are significantly more seasonal compared to Liseberg with peak months accounting for over 40 percent of annual attendance at times.

Seasonality at Liseberg 2013 vs 2018

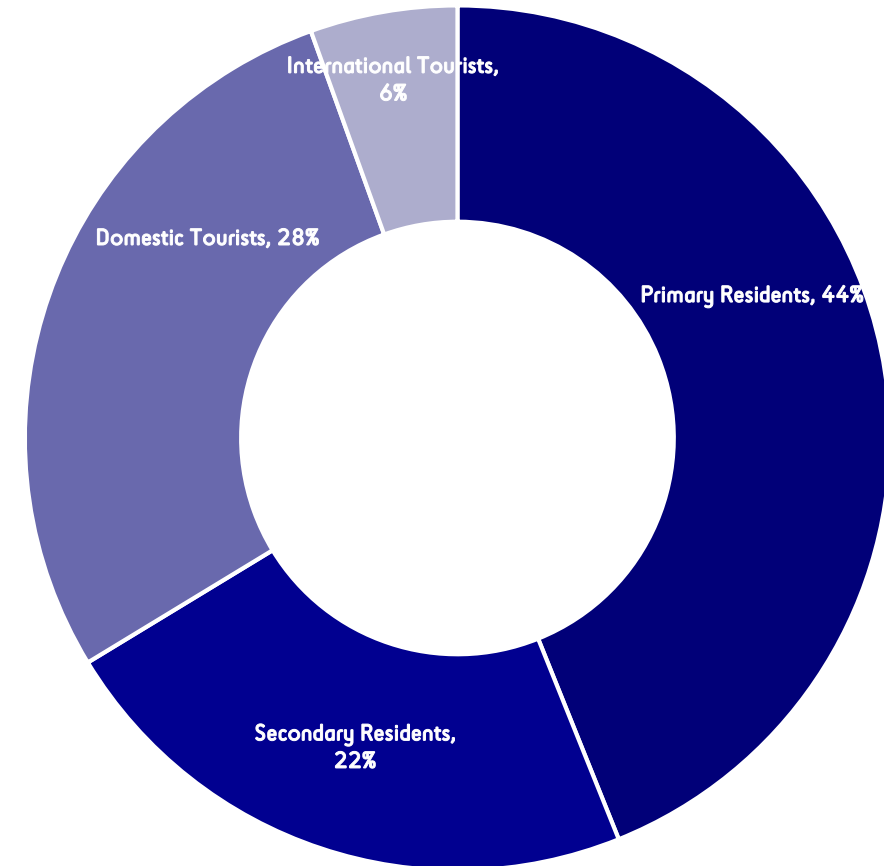


Visitor Mix

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- The chart shows the current visitor mix at Liseberg. We took survey data provided by Liseberg management and attributed each visitor group to one of the four key market segments as defined in our market section i.e. primary and secondary resident markets, and domestic and international tourists. Primary residents (within 60 minutes' drive time) account for around 44 percent of all visitors.
- Being located in an urban environment, having a modest general admission charge compared to most parks of this scale, and a good number of season pass holders (there were around 65,000 season pass holders and 180,000 season pass holder visits in 2013) drives the primary resident market numbers.
- *The key changes in 2018 from the 2013 figures are the fall in distributions of both primary and international markets. The primary resident portion fell by four percentage points in the past five years, while the foreign share fell by half from 12 to 6 percent. The Secondary Market, on the other hand, experienced a growth from 12 to 22 percent with the domestic share remaining constant.*

Attendance Mix, 2018



Market Penetration

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- The market mix is useful in understanding the key drivers of demand, but to put in context of other leading theme parks around Europe and the world, we assess market penetration. Market penetration rates reflect the percentage of a market segment that visits a given attraction each year. The figure on the next page shows the average market penetration rates at selected Scandinavian theme parks.
- Primary market penetration rates range significantly among the selected attractions. In most cases, primary resident market penetration rates are higher than penetration rates achieved in other markets. This reflects the fact that most parks around the world achieve a greater proportion of their attendance from nearby residents than from tourists.
- As propensity to visit attractions decreases with travel time, secondary market penetration is generally significantly lower than primary market penetration and for many parks the penetration rate is equal to between a quarter and half of the primary market penetration rate.
- Domestic tourist market penetration rates are generally fairly similar to secondary resident market penetration rates, except in instances where the scale of the attraction is sufficient to become the driver of domestic tourism, where an attraction is located in a major tourist centre, or where a small market and limited competition allows for a higher penetration rate.
- International tourist market penetration rates for most European parks are modest, with just a few exceptions. In the case of Disneyland Paris, the resort acts as a driver for international tourism and performs well in this market. In a small number of other cases, the parks successfully attract significant international visits through a strong brand or targeted marketing or through being well located for nearby resort guests (e.g. Port Aventura). The figures in our chart include the major destination parks in Europe, which somewhat distorts the median and average domestic and international benchmarks.
- Overall, there is a relatively strong pattern with major parks with highly entertainment orientated themes with broad market appeal, achieving significantly higher penetration rates than smaller operations, or those with educational or cultural themes, or a more niche appeal. The strongest penetration rates are achieved by heavily invested destination parks (some of which are branded and others not--although the very top performers are branded) typically offering multiple attractions, hotels, amenities and other broad ranging facilities.

Market Penetration

DRAFT

- Liseberg outperforms the theme park market in its resident markets penetration rates by a large margin. However, Liseberg is not a usual theme park as it is located in the city centre and allows access to the park for a modest general admission fee to those not planning to take any rides.
- As a result, the park benefits from a strong repeat visitation from local residents visiting for the general environment, dining, events etc. Hence, the strong resident market penetration rates. In this sense, Liseberg is more comparable to parks like Grona Lund (Sweden) and Tivoli Gardens (Denmark). These parks also achieve very strong resident market penetration rates, however Liseberg significantly outperforms both parks in the primary market.
- *In 2013 we noted the secondary market penetration rate was at 51 percent. We see that 2018 has exceeded this by almost 30 percent. The possible reasons for such a change is two fold: the upsurge in secondary market visitors and the change in market calculations highlighted in the Available markets section.*
- As for the tourist markets, Liseberg performs above the industry averages in the domestic tourist segment, the park is outperformed only by a few of the world's major destination parks such as, for example, Europa Park and Universal Studios.

Liseberg Market Penetration Compared to Scandinavian Parks



Source: Liseberg & LDP

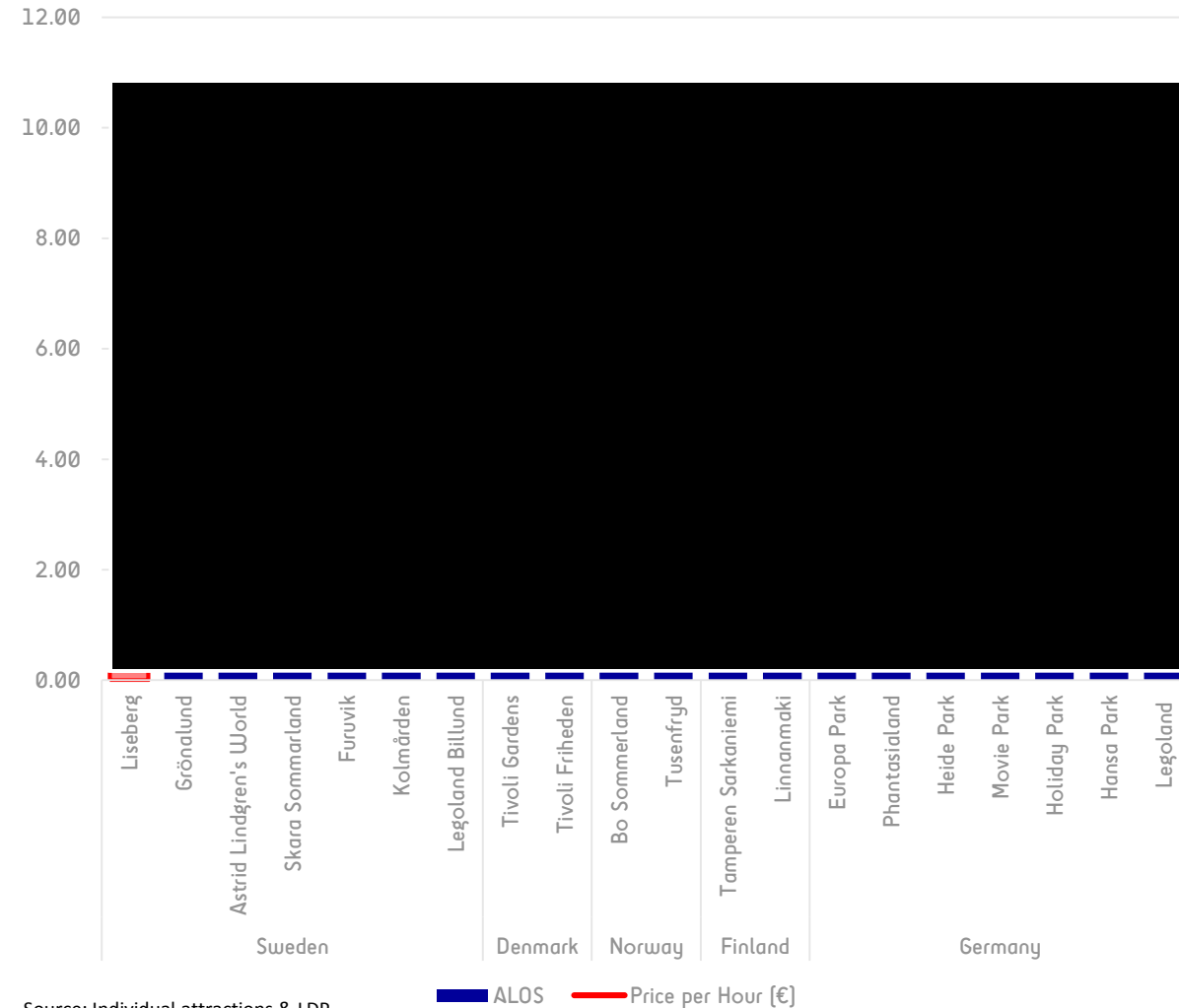
In the international tourist market, Liseberg used to perform very well at 37 percent in 2013 and was only outperformed by one major US park in our database. As shown in our attendance mix, there was a considerable fall in the share of international visitors which has evidently led to the demise of its penetration rate to 12 percent. Another factor is the increase in the international tourist markets.

ALOS & EV

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- Using the data sent by management, the Average Length of Stay is estimated to be over 5.5 hours (or precisely 5 hours 34 minutes).
- *Since the 2014 report, Liseberg have successfully and significantly increased their length of stay from 4 hours 55 minutes.*
- This is, however, still a fairly modest length of stay in theme park terms which reflects strong repeat visitation and the fact that repeat visitors tend to spend less time at a park than first time visitors. It also reflects the low initial admission price as people are less compelled to get the full 'worth' out of their ticket.
- More and more European parks are attempting to extend their length of stay on property with night time dining, drinking, shows and events, although this is more easily achievable for Southern European parks located in warm climates.
- Liseberg's length of stay is now more in line parks in Denmark, Norway, Sweden, Finland and Germany, where the length of stay averages 5.5 hours, although still lags behind the likes of Tivoli Gardens, Tusenfynd and Sarkaniemi who record an ALOS closer to six hours.
- At SEK 485 (including rides), the lead price at Liseberg is the strongest across the researched markets. Entertainment Value (EV) per hour is €8.28 based on 2019 pricing and is also the strongest in the region. *This is also unchanged from the 2014 report, although the EV has fallen (with the rise in ALOS) from €9.30.*

Average Length of Stay and Price per Hour, 2018 (€)



Source: Individual attractions & LDP

■ ALOS ■ Price per Hour (€)

Operating Performance

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- The table opposite contrasts per capita spends at Liseberg against Scandinavian benchmarks. The per capita spends have been calculated over the number of visitors (“capita”) for the overall season, i.e. the main season, Christmas and Halloween but excluding concerts.
- Overall, the per capita spends are within the industry ranges, although in total it exceeds all other Scandinavian benchmarks. Both admissions and F&B are above averages while the merchandise and other spend are towards the lower end. It is generally quite challenging for non-branded city based amusement parks with no heavy theming but with strong repeat visitation to push the merchandise spend, as repeat visitors spend less on shopping during subsequent visits, *and we see no change to this since 2013, where merchandise spend was slightly higher at €1.77.*
- Given the modest length of stay compared to many large European parks, the per capita Food & Beverage spend at Liseberg is fairly strong. Typically, strong F&B spends are observed at parks where visitors stay for seven plus hours and need an extra meal or snack. We understand the strong spend at Liseberg is impacted by the fact that many local visitors come to the park for a meal rather than the ride/ entertainment experience.

- *A significant change to our results is the exchange rate. Within the past 5 years the Swedish Krona has weakened against the euro. So although total spending has risen from SEK306.93 in 2013 to SEK354.83, it has appeared to have dropped in terms of the euro.*

Per capita spends at Liseberg, 2018

	Scandinavian Parks			Liseberg	
	Minimum	Average	Maximum	€ ¹	SEK
Admission				22.97	235.63
Food & Beverage				9.81	100.60
Merchandise				1.54	15.83
Other				0.17	1.77
Total Spend				34.59	354.83

¹ Exchange rate used: €1.00=SEK10.26 (average for 2018)

Source: Liseberg and LDP

Operating Performance

DRAFT

- The table opposite demonstrates a visitor revenue mix at Liseberg compared to other European parks. As shown, the mix is within the industry norms with a slight skew towards the admission and F&B revenues and a slightly lighter proportion of merchandise revenue in the total. Despite a strong proportion of repeat visits and an atypical pricing structure at Liseberg, the admission yield (61%), which is calculated by dividing the admission per capita spend by lead price (net of VAT), is still in line with the industry average. This is an impressive performance.
- *The revenue mix is in line with the mix witnessed in 2013.*

Visitor revenue mix at Liseberg, 2018				
	European Parks			Liseberg
	Minimum	Average	Maximum	
Admission Yield				61%
Admission				67%
Food & Beverage				28%
Merchandise				4%
Other				1%
Source: Liseberg and LDP				

Operating Performance

DRAFT

- Based on the data provided by the Liseberg management team, we summarise gross revenues, cost of goods sold, net revenue, earnings before tax (EBT), EBT margin, reinvestment and reinvestment as a percent of gross revenues on the table opposite.
- Overall the revenues have continued to grow as have net revenues from 2015 to 2018. We calculated the gross revenues based on the net sales and cost of goods sold figures provide by the management team.
- Overall, it is not unusual for independent parks to achieve an EBITDA margin of between [REDACTED] percent as these parks do not benefit from the efficiency of scale groups of parks have. Groups can share central costs and save on marketing, administration and costs of goods sold. The EBT margin shown for Liseberg is under 10 percent which is not hugely surprising given Liseberg is owned by the city and is not focused purely on profitability.
- The levels of reinvestment in Liseberg is very impressive, averaging nearly 17 percent over the four years shown. This is very much a trend we have seen at other Swedish parks where reinvestment is high. Normally, we would expect to see 10 percent of revenues reinvestment per annum on average.
- As we understand the park employed 1,107 FTE staff in 2017, and this this translates into 2,760 visits per FTE staff in 2018. Typically, leading European parks look into a ratio of between [REDACTED]. At the low end of this range are parks with long seasons and a relatively even spread of visitors. The most seasonal parks that operate for relatively short periods have ratios at the top end of this range indicating a highly staff-efficient operation.

have high visitor to staff ratios, while parks with more modest attendance have lower ratios. In this regard, Liseberg performs in line with the industry standards.

As we understand its staff costs equate to well over 30 percent of revenues which would be within the industry range although towards its upper end (the typical range is from [REDACTED] percent of revenues). High staffing costs are quite typical for Scandinavian parks often accounting for over 30 percent due to high salaries relative to many European countries and strong social benefits which increase the on-costs.

Operating performance of Liseberg				
	2015	2016	2017	2018
Gross Revenues	1,280,223,000	1,311,683,000	1,369,043,000	1,374,949,700
Cost of Goods Sold	141,223,000	140,683,000	147,043,000	145,949,700
Net Revenue	1,139,000,000	1,171,000,000	1,222,000,000	1,229,000,000
EBT	122,000,000	100,000,000	91,000,000	75,000,000
EBT margin	9.5%	7.6%	6.6%	5.5%
Reinvestment	91,000,000	205,000,000	252,000,000	357,000,000
Reinvestment as %	7.1%	15.6%	18.4%	26.0%



LDP

Objective Analysis
Creative Thinking

International Benchmarking – Waterparks

International Waterparks – Overview

DRAFT

- The modern waterpark emerged in the late 1970s when leisure developers in both the private and public sectors recognised the broad popularity of water recreation and developed a concept linking a number of water attractions in one gated park. This waterpark concept evolved rapidly from simple slides and pools to the present product offering, which often consists of a broad mix of attractions, with waterparks increasingly evolving and differentiating their offers. Of late, additions such as beaches, surfable waves, Flowrider surf simulators, Master Blaster water coasters and ever more extreme slides have further pushed the boundaries of waterpark design.
- These waterpark facilities have proven over time to be both popular and profitable when compared to some other forms of more capital intensive attractions. Waterparks typically incorporate slides and flumes balanced by more passive swimming and sunbathing/lounging experiences as well as eating and drinking facilities, which help to increase length of stay and improve economic performance.
- Typically, ALOS at indoor water parks is between 3 and 6 hours (although some large-scale parks exceed this range), with modest size indoor waterparks achieving in the region of 3-4 hours. As with all attraction types, the longer the duration of stay, the higher the price which can be charged and the greater the level of secondary spending. However, as much of the time spent at waterparks can be rather passive, for example sunbathing or swimming, spend per hour tends to fall below other attraction types.
- Many waterparks derive the majority of their attendance from the local resident base, typically within a one hour drive (often accounting for 60-90% of the attendance), although others are more resort guest focused.
- Due to the dependence on the local market for some parks, repeat visits are typically important, with implications for both pricing and reinvestment requirements. As with theme parks, waterpark owners must regularly reinvest in their facilities to ensure ongoing appeal to resident markets and to generate repeat visits from their primary population bases. Manufacturers and suppliers of equipment for waterparks constantly innovate to satisfy this need for new experiences. Costs associated with waterpark capital items have grown significantly over the past twenty years.
- Resort waterparks located in strong tourist markets which derive significant visits from domestic and international tourists can face reduced pressure to provide new experiences each year, and reinvestment can be somewhat lower. This is a pattern we have seen in high volume tourist locations on the Spanish Costas for example.

International Waterparks – Overview

DRAFT

- As the country where waterparks originated in the 1970s, the U.S. has a mature and well developed waterpark market. However, growth in the development of waterparks slowed during the late 1980s as markets became saturated.
- Recently though, a new phase of development has taken place where waterparks have been developed successfully as second gates at regional theme parks, or as fully themed experiences, with investment levels closer to that of a theme park, such as the waterparks to be found in Orlando. Internationally, this level of theming and finish was recently inaugurated in Abu Dhabi at Yas Waterworld, which joins Wild Wadi and Aquaventure in Dubai as among the best and most heavily invested new waterparks. These offer a full waterpark experience in a highly themed environment, with dedicated and specialised retail facilities and food and beverage to complement the offer and links with resort accommodation.
- In addition, a new, high quality indoor waterpark product has emerged in the formerly under developed northern US markets. These parks have seen more intense experiences and better presentation within an indoor park setting (often associated with accommodation). The ability to mitigate against poor weather while still providing a compelling product has opened up new markets. This new breed of indoor park is often built as a core component of resort hotels. Located primarily in the Wisconsin Dells (Great Wolf etc.) but

now spreading around the US, these waterpark hotels have successfully driven tourism and established new weekend destinations that cater to regional residents as well as corporate groups.

Waterpark development in Europe has seen growth over recent years and Spain, which saw significant growth in the 1980s and early 1990s, is amongst the most developed markets. The Southern European waterpark offer is typified by outdoor regional waterparks, many of which are in strong tourist markets.

In Northern Europe, indoor water leisure offers are more typical. The indoor waterparks in Germany and the UK have often lacked quality and intensity and in some cases have struggled to repay capital. Many were public sector led projects associated with municipal leisure centres and provided little more than a pool with a few slides. There are a few examples of innovative indoor projects, such as Splash Landings at Alton Towers, a themed waterpark with extensive water play features constructed as a component of one of the hotels at the Alton Towers resort and as a second gate for the theme park. These are a new generation of indoor waterparks with a few notable examples built and more in planning.

International Waterparks – Overview

DRAFT

- Costa Caribe which opened at Port Aventura in Salou was constructed to provide additional content alongside the theme park and resort offer, as per Splash Landings. This is one of Europe's best parks, if somewhat small in scale given its potential, with extensive theming and some major signature water rides such as a Master Blaster. The higher end water offers in Europe have begun to expand and differentiate their offers with the addition of standing waves (Flowriders) and major slides such as the Master Blaster water coaster.
- **Themed outdoor waterpark** - heavily themed, outdoors and located in major tourist markets (e.g. Orlando), these parks are at the forefront in terms of capital expenditure, attendance and revenues.
- **Outdoor regional waterpark** - typically built in locations with good climates and often in tourist areas (e.g. Mediterranean in Europe), these tend not to be heavily themed but offer thrilling slides, family slides, waterplay and lounging areas.
- **Indoor waterpark hotels** - these all-inclusive waterpark concepts have developed in the US primarily in areas of inclement weather such as the Wisconsin Dells, and have proven integral to a developing tourism industry. In Europe some indoor waterparks are associated with accommodation, including Alton Towers waterpark in the UK, Tropical Islands and Galaxy Erding (at Therme Erding) in Germany, Gustavsvik in Sweden, and Center Parcs across Europe (although water element in Center Parcs is only part of the resort). The majority have evolved into resorts over time and are not fully integrated.

Principal Concept Types

- Waterparks are a diverse attraction industry segment with many different forms which have variation in terms of scale, capital, weatherization, activities and other factors.
- **Indoor waterparks**: in climates such as Northern and Western Europe, the indoor waterpark is the most typical concept type, but within this there are several forms. Many have been swimming pools with a handful of slides, presented as municipal pools. These tend to be relatively cheap to visit but also have a low perceived value. At the higher end of the industry, indoor waterparks have comprehensive slides, waterplay and even signature elements such as lazy rivers, master blaster water coasters and themed waterplay.

International Waterparks – Overview

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- The table on the right sets out typical penetration rates for indoor water parks:
 - For most indoor waterparks, primary resident market penetration is by far the highest of any market segment. The majority are not in resort areas and have a more resident focus.
 - Penetration of the secondary market is significantly lower highlighting decreasing propensity to visit and repeat visit as drive time increases. Most parks achieve between [REDACTED] percent in this segment with only a few outliers.
 - Among typical indoor waterparks located in cities or other non-resort locations, tourist penetration is often modest with an average of just [REDACTED] percent of tourists within an hour and several achieving [REDACTED] percent.
- Great Wolf Lodges and other resort waterparks represent a weekend destination and tend to draw residents from further away (up to 3 and sometimes 4 hours).

Penetration Rates at International Indoor Waterparks

European Indoor Waterparks				
	Primary [0-60 min]	Secondary [60-120 min]	Domestic [0-60 min]	International [0-60 min]
Max	[REDACTED]			
Q3				
Median				
Q1				
Min				

Great Wolf Lodges, USA				
	Primary [0-60 min]	Secondary [60-120 min]	Tertiary [120-180 min]	International [0-60 min]
Max	[REDACTED]			negligible
Average				negligible
Min				negligible

Source: individual attractions and LDP

International Waterparks – Market Penetration

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- Most waterparks are resident biased, particularly typical indoor parks. In tourism resort destinations some perform well with tourist market segments. Those that are able to target tourists in significant numbers are located in very strong tourist markets and are typically within a couple of minutes of leisure orientated hotels, resorts and beaches.
- Despite the strong performance of some of the parks in their tourist markets, resident market penetration rates are typically higher than tourist market penetration rates with an average of around █ percent as compared to █ percent and slightly less than █ percent in the domestic and international tourist markets respectively. This illustrates that although some of the parks are tourist focused, take up among tourists is still relatively modest, with parks requiring large markets.
- Resort orientated waterparks linked with accommodation have a slightly different penetration of tourists as they get a good majority of their visitation from on-site guests. Typically they achieve █ percent of total visits from their on-site resort guests. Nevertheless, they are still able to achieve strong penetration rates of the regional resident markets.

European, US Regional & Destination Waterpark Market Penetration				
	Primary [0-60 min]	Secondary [60-120 min]	Domestic [0-60 min]	International [0-60 min]
European regional outdoor waterparks				
Maximum				
Minimum				
Median				
Weighted Av.				
US regional outdoor waterparks				
Maximum				
Minimum				
Median				
Weighted Av.				
US waterparks including destination parks in Orlando				
Maximum				
Minimum				
Median				
Weighted Av.				
Source: Individual parks and LDP				

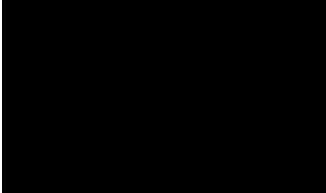



International Waterparks – Revenues

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- **Admission yield** is an average spend on admissions as a percentage of the full adult admission price. In some markets there has been some downward pressure on yields over the past decade or so, with an increasing expectation of promotions. Yields which were typically in the region of █ percent are now around █ percent (although some outliers exceed this range).
- **Admission Revenue:** Revenues from waterparks are driven primarily from admission, with the exception of waterpark hotels where it is often included in the room rate. The following table shows the distribution of revenues amongst more typical stand-alone waterparks in Europe and the US. As shown, admissions typically account for the greatest share of total waterpark revenue, representing █ percent at European parks, and a similar, if slightly broader range of █ percent at US parks.
- **Secondary Revenues: Food & Beverage (F&B)** typically accounts for around a █ of revenues. Alcohol has found to be a major driver of the F&B spend at waterparks - modern indoor waterparks can drive up to █ percent of their total per capita spend from alcohol sales. Depending on the country, some parks restrict alcohol consumption.
- **Merchandise** comprises on average just █ percent at European parks largely due to a lack of merchandise outlets, little or no theming or branding, and a high proportion of resident visitors at these facilities. For

comparison, US parks, which tend to offer a wider range of branded merchandise and in some cases derive a higher proportion of visits from tourist markets, generate slightly more revenue from this source (█ percent) but it still represents only a modest income stream.

- **Other** revenues include lockers, towel and equipment rental, dryers, etc. There is a trend to include these extras in the headline price rather than charge separately.

Comparative Per capita expenditure levels at European and US waterparks				
Category	Selected European Waterparks		Selected US Waterparks	
	Range	Average	Range	Average
Admissions				
Food & Beverage				
Merchandise				
Other				
Total	100%		100%	

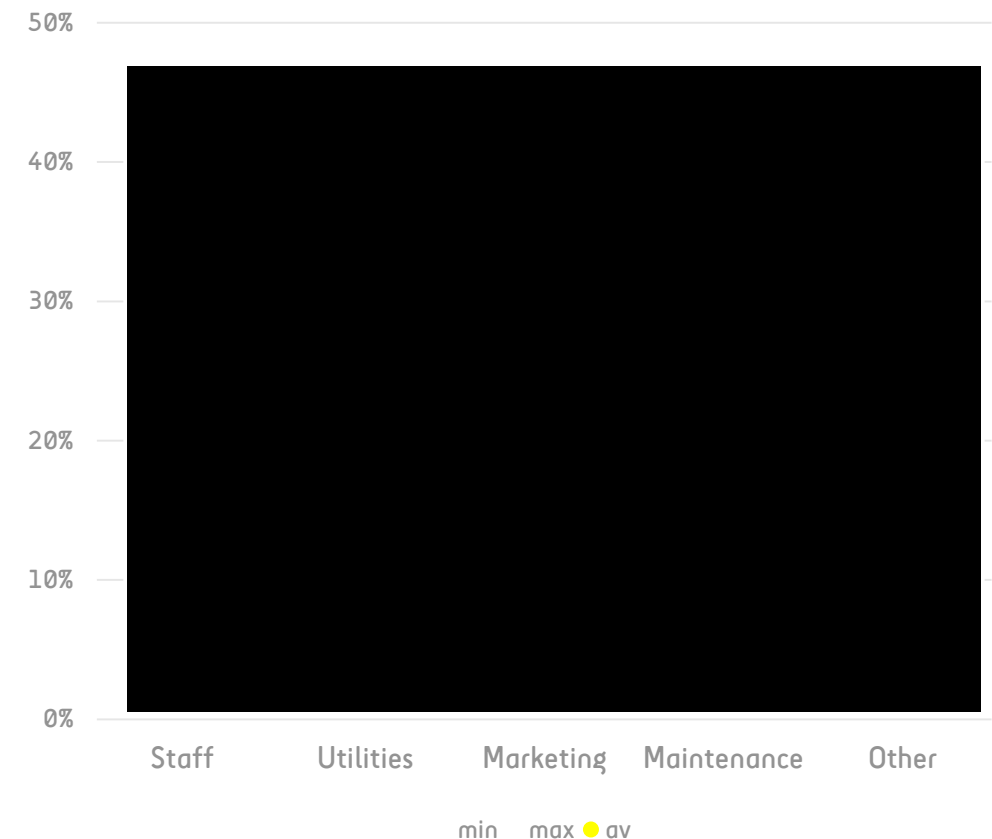
Source: World Waterpark Association, Individual parks and LDP

International Waterparks – EBITDA

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- Similar to most attractions, staff cost is the single highest expense at waterparks, averaging █ percent of revenues. We are aware of an experienced European operator that managed to decrease its staff cost to 30 percent due to the incorporation of modern technology. Those parks achieving the staff cost below 30 percent are either located outside Western Europe or are part of a larger development benefiting from shared costs.
- Operating costs amongst indoor parks are typically higher than at outdoor parks due to the increased utility costs for climate controlled environments (an average of █ percent of revenues). Although smaller in footprint than outdoor parks, the increased utility costs can have an impact on overall profitability.
- As a result, many indoor waterpark hotels tend to package many of the operating costs within the overall opex of the hotel. Similar to outdoor parks, staff costs make up the majority of the costs and need to be built up to reflect the individual size of the park, throughput and local market labour costs.
- While municipal and basic indoor waterparks have sometimes struggled to make reasonable operating margins, more commercial ventures can achieve significant **EBITDA** margins, up to █ percent in strong markets and with solid management. *Since the last report we have uncovered more information on costs associated with waterparks. The biggest change is found with utilities costs, here the average utility cost is now as high █ percent compared to the █ percent estimate in 2014.*

Operating costs (min, max, average) as % of revenues, at waterparks



Source: Individual attractions and LDP



LDP

Objective Analysis
Creative Thinking

Waterpark Attendance, Revenues, Costs & EBITDA

Assumptions

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- In the following sections we outline the feasibility analysis for the waterpark attraction, looking in detail at the throughput analysis and forecasts, per capita spend analysis, operating costs and detailed cash flow and financial analysis. But first we outline some core feasibility assumptions:

- Firstly we have assumed the waterpark will be primarily an indoor waterpark to protect against the inclement weather, but there will also be some outdoor rides also (such as they have at Gustasviks) to benefit from the good weather and longer days during the summer months;
- Importantly we have assumed that the waterpark is open to the general public and not just onsite overnight resort guests – this can be debated and of course has major implications in terms of capacity and capital, some waterpark hotels do not open to off-site day visitors (e.g. most Great Wolf Lodges);
- We have assumed that the attraction will be operated to the very highest standards by experienced operators from inception;
- We have also assumed excellent pre-opening and ongoing marketing - it will be absolutely imperative that the attraction is marketed as a family attraction to residents of the region as well as to tourists visiting – the resort must be sold as well as the day visit;

preparation and soft opening is allowed for;

- Our work assumes healthy and ongoing reinvestment to keep the experience fresh and ensure repeat visitation;
- We assume this will be run in accordance with the main Liseberg parks and therefore will benefit for some shared central costs;
- We assume the first full year of operation will be 2022.

Attendance Forecast

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- Based on the above review of the competition, available markets, site, and other factors, the following methodology was used to assess the potential for each use.

Offsite attendance

- The success of any attraction is in its ability to draw from, or 'penetrate' the different markets available to it. We have noted that in all attractions, regardless of theme, scale, size or concept, the penetration of the resident markets will decrease as the distance increases. This is true regardless of the attraction type and is demonstrated in our benchmarking.
- Different types of attractions will have varying degrees of success pulling from each individual market segment based on the experience offered. So some attractions will draw more from local residents, whilst others might draw more strongly from domestic or international tourists. Using the range of comparable attractions reviewed earlier we have determined baseline penetration rates for each of the markets. We have applied penetration rates that we believe will apply given the level of competition and the content/experience provided.
- On the next page we show our attendance projections based on stable*

year 2025. Our first piece of work assumed a 2018 opening with a stable year 2021. We have assumed similar penetration rates as to our first but as a result of the change in markets and later opening the projected attendance is higher. Whilst visits from the resident markets is very similar to what we projected in our first piece of work, the big increase in international tourists is driving the higher number of visits from tourists.

As shown on the following page, we are projecting an annual attendance in stable year 2025 of around **425,000** visits from the offsite markets, with a range from between **390,000 to 460,000**. *The mid-case for projections from our previous work was 395,000 from the offsite markets.*

- After an initial 'champagne effect' we would expect the attendance to grow once it has reached stable year four in line with market growth. With tourist markets expecting to grow, we would expect - capacity allowing - that attendance would grow over the medium / long term.

Attendance Forecast – Off Site Markets

DRAFT

Low, Medium and High Attendance Scenarios for Liseberg, Stable Year 2025

	Market Size	Market penetration rates			Projected attendance		
		Low	Medium	High	Low	Medium	High
Resident Market							
Primary [0-30 min]	911,880	13.0%	13.5%	14.0%	118,544	123,104	127,663
Primary [30-60 min]	476,392	13.0%	13.5%	14.0%	61,931	64,313	66,695
Secondary [60-120 min]	888,359	4.0%	4.5%	5.0%	35,534	39,976	44,418
Total Residents	2,276,631				216,010	227,393	238,776
Tourist Market							
Domestic tourists	3,766,799	3.5%	4.0%	4.5%	131,838	150,672	169,506
International tourists	1,617,045	2.5%	3.0%	3.5%	40,426	48,511	56,597
Total Tourists	5,383,844				172,264	199,183	226,103
TOTAL ATTENDANCE					388,274	426,576	464,879

Source: LDP

Attendance Forecast – On Site Markets

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- Below we summarise the number of keys and projected on site annual guests as provided by Liseberg.
- For our original piece of work we built up a fairly detailed analysis based on the mix of guests, likelihood to visit the waterpark, whether they would be additional visits and so forth. We are happy with our original assumptions and therefore from our previous work we have been able to derive a ratio of visits to room nights.
- Based on the revised number of rooms and the adjusted occupancy (both of which are very close to our original projections, we have applied our ratio to the revised room nights projection.
- As shown, there are planned to be 457 keys on-site. Based on the implied room nights and our assumed capture of room nights we forecast around 60,000 net additional visits to the waterpark from the onsite hotel. *Our original work was based on 450 rooms and with a very similar occupancy rate and therefore the total visits was close to the numbers shown at around 57,000.*
- Adding this to our off site markets mid-case scenario and the on site visits as shown below we forecast a stable year attendance of **490,000** (2025). *Our previous work assumed an earlier opening year and stable attendance of 455,000 (based on 2021 markets). In our previous work, by 2025 the forecast attendance was c. 480,000.*

Projected On Site Attendance at Liseberg Waterpark				
	2022	2023	2024	2025
Hotel Keys	457	457	457	457
Available room nights	166,805	166,805	166,805	166,805
Occupancy	68.8%	71.3%	74.8%	75.2%
Room nights	114,725	118,928	124,817	125,416
Capture of room nights	50%	50%	50%	50%
Total waterpark visits	57,363	59,464	62,409	62,708

Physical planning

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- In this section we outline the physical planning parameters for the waterpark. We use the design day as the daily throughput that the attraction should be built to, and this represents the average busy day rather than the peak day. By using this, attractions are not developed to a scale so large that they feel empty most of the time.
- We have reflected upon the findings from the benchmarking assessment as well as seasonality of similar attractions in the local market. We have assumed peak monthly visitation to be 18.5 percent.
- Being indoors seasonality will naturally be smoother at the waterpark than the theme park but we also need to consider how popular the site is during the peak months and so there will be some seasonality at the waterpark, and particularly if there are some outdoor components.
- Based on the assumptions shown, the peak on-site attendance would be around **1,960** under the medium scenario on design day. This is based on 55 percent of design day attendance in the park at one time. This is the capacity the waterpark should be built to. The team at Liseberg are assuming the maximum capacity at the waterpark should 2,800. Our projections suggest the market should easily be supported at this level of capacity. In our previous work we used the same assumptions but clearly the attendance was different.

• *Peak on site in our first piece of work was nearer 1,800*

Physical Planning, 2025			
	Low	Medium	High
Annual Attendance	450,982	489,284	527,587
Peak Month	18.5%	18.5%	18.5%
Week % of Month	22.5%	22.5%	22.5%
Design Day % of Week	17.5%	17.5%	17.5%
Peak on Site	55.0%	55.0%	55.0%
Peak Month Attendance	83,432	90,518	97,604
Weekly Attendance	18,772	20,366	21,961
Design-Day Attendance	3,285	3,564	3,843
Peak On-Site Attendance	1,807	1,960	2,114

Source: LDP

Revenue Assumptions

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- We feel the mid case scenario, including visits from the accommodation, of **490,000** is a reasonable but also a robust attendance scenario. The markets are available to deliver this sort of performance but it will be important to deliver a fantastic product and experience for all the markets, and to aggressively and continually market to them.
- We have based our lead admission price on local market Entertainment Value (EV) at other attractions in the market, but paid particular attention to price per hour at the Sarkanniemi theme park.
- We have assumed;
 - A price per hour of **€7.10** (or SEK 75, 2019 values). EV at Liseberg is €8.28 (SEK 87) but this including admission and ride pass. Across Nordic parks the average is €7.10 (SEK 75) after removing a couple of outliers.
 - With an estimated length of stay of 4.0 hours at the proposed waterpark, this results in a headline price of **€29.00** (or **SEK 310** in 2019 values)
 - We have assumed broadly a **65 percent yield**, which is comparable stand-alone waterparks, and allows for an additional level of discounting to allow for the fact that a number of visitors will be sourced from the on site markets, and they will be afforded a certain degree of discounting.
- We assume that a bundled waterpark ticket may be included within the room package and that an amount equivalent to the yield would be provided to the waterpark as a pass-through.
- We have estimated secondary spend based on typical ratios of secondary to lead price ratios at waterparks, but also considered spending patterns currently at the existing amusement park, and the projected length of stay.
- This resulted in average total per capita spend by visitors that could be achieved at the proposed waterpark.

Revenue Assumptions

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- The figure opposite shows our key revenue assumptions. We have assumed VAT on admissions, merchandise and other to be 25 percent, with food & beverage at 12.5 percent
- Secondary spend levels have been calculated based on similar products and assumed ratio of the admission per capita.
- We calculate a total admission per capita spend of SEK 202 or SEK 161 less VAT.
- As already alluded to, we have taken what we feel is a reasonable admission **yield of 65 percent** to allow for discounts on children, families, other groups and promotions.
- The total spend per head (incl VAT) equates to SEK 302, and SEK 247 less VAT.

Key revenue assumptions [2019 values]

	Including VAT	Excluding VAT
Lead admission price	SEK 310	SEK 248
Admission yield	65%	65%
Admission per capita	SEK 202	SEK 161
Secondary spend		
Food & beverage	SEK 65	SEK 58
Merchandise	SEK 15	SEK 12
Other	SEK 20	SEK 16
Total per capita revenue	SEK 302	SEK 247

Note: VAT included at:
Admissions, merchandise & other at 25%
Food & beverage at 12.5%

Operating Costs

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- Opposite we show the assumed operating expenses for the proposed waterpark. As is mostly the case, staff costs are the greatest attraction cost accounting for 34.9% percent of revenues, which is similar to other Scandinavian benchmarks (although at the high end) and should provide an adequate budget. We show the staffing assumptions on the following pages.
- We have assumed marketing to be solid, particularly over the first couple of years of the operation at 11 percent, stabilising at 8 percent which is in line with good performing attractions.
- The other operating costs have been applied based on typical ratios as a percent of revenues.
- Cost of sales have been included at 30 percent of food and beverage revenues, 40 percent for retail and 20 percent for other spending. This gives a blended COGS of around 30 percent, which is close to what is being seen at the main park. These are very typical and most attractions have cost of sales within a very tight range. On the page after next we show our full profit and loss projections for the proposed waterpark at Liseberg. We have included inflation from 2019 at 1.5 percent per annum, in line with historical inflation in Sweden.
- This illustrates a decent performance for the proposed waterpark with an ok operating profit, with an EBITDA margin of around 21% in year 5.

improvement in staff costs could help this scenario

Forecast operating expenses	Year 1	Stable year
<u>Percentage of Revenues</u>		
Staff Costs	36.2%	34.6%
Marketing Expenses	11.0%	8.0%
Repairs and Maintenance	1.5%	7.0%
Utilities	10.0%	8.0%
Admin & general	7.0%	6.0%
Other	5.0%	5.0%
Total		
<u>Percentage of Expenses</u>		
Staff Costs	51%	50%
Marketing Expenses	16%	12%
Repairs and Maintenance	2%	10%
Utilities	14%	12%
Admin & general	10%	9%
Other	7%	7%
Total		

Staffing Assumptions

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- In building up the staffing costs for the waterpark, we looked at both salaried and hourly staff. We also accounted for full or partial years for individual positions prior to opening.

Salaried Employees

- A staff plan for permanent salaried employees was devised based on typical requirements for theme parks. However, LDP believes that some savings can be achieved by shared operations with the existing Liseberg park staff and/or the hotel staff.
- As a result, the following positions are assumed to be covered by existing park operations and therefore not an additional cost burden on the waterpark: HR director, Chief Engineer, Health&Safety Manager, Chef, Workshop manager and Electrician.
- Salaries were based on average salaries provided by Liseberg, with some variations to reflect seniority and average salary levels in Sweden.

Hourly Employees

- Initially we assumed 12 hour days throughout the season, open every day except Christmas day. We also assumed that the Adventure River was closed September to March

In looking at hourly staff costs, required positions for low medium and high days were calculated for 3 seasons based on the Whitewater schedule. We also considered the FOH and retail/F&B requirements. People to cover breaks were also programmed in resulting in 39-44 positions.

- In an effort to reduce staff costs, we reduced this to 8 on low days, 10 on medium days, and 12 hours on busy days. Hourly wage levels were again based on client input.
- We would suggest further investigation of salaries and positions in conjunction with Liseberg to see if additional cost savings could be achieved and ensure that the staff plan reflects Liseberg's thoughts on operations.
- The following page summarises the positions and related staff costs. This is followed with the multi-year P&L for the park.

Staffing Programme

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Projected Staff Plan				
Position	Basic Salary [2019 values]		Salary Cost [with on-costs]	FTE Employees
General Manager	SEK 860,000		SEK 899,283	1.0
Finance Manager	SEK 800,000		SEK 836,543	1.0
Marketing Manager	SEK 820,000		SEK 857,456	1.0
Commercial Manager	SEK 800,000		SEK 836,543	1.0
Accountant	SEK 600,000		SEK 627,407	1.0
Sales Manager	SEK 620,000		SEK 648,321	1.0
Pr Manager	SEK 580,000		SEK 606,493	1.0
Engineering Manager	SEK 620,000		SEK 648,321	1.0
Operations Manager	SEK 500,000		SEK 522,839	1.0
Cashier	SEK 520,000		SEK 543,753	1.0
Sales Representative	SEK 350,000		SEK 365,987	1.0
Catering Supervisor	SEK 470,000		SEK 491,469	2.0
Retail Supervisor	SEK 470,000		SEK 491,469	2.0
Hr Executive	SEK 470,000		SEK 491,469	1.0
Maintenance technicians	SEK 500,000		SEK 522,839	3.0
Cleaning Supervisor	SEK 450,000		SEK 470,555	1.0
Area Supervisor	SEK 470,000		SEK 491,469	3.0
Total			SEK 10,352,216	
Total Hourly Wage Staff	SEK 29,775,315		SEK 29,775,315	[note: no on-costs have been added to hourly staff]
Total Staff Costs			SEK 40,127,531	

Profit & loss statement

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Projected Account of Profit & Loss for the Proposed Lisberg waterpark

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Estimated Annual Attendance	-	468,374	475,461	483,592	489,284	496,637	505,031	513,560	521,507	529,631	537,937	546,429	555,113	563,994	573,076
Pay-One-Price Income															
Admission	-	78,950,631	81,347,561	83,979,635	86,242,731	88,851,832	91,708,867	94,656,452	97,563,026	100,569,149	103,678,542	106,895,078	110,222,784	113,665,847	117,228,624
Food & Beverage	-	28,424,046	29,286,997	30,234,604	31,049,370	31,988,707	33,017,305	34,078,504	35,124,937	36,207,211	37,326,664	38,484,691	39,682,742	40,922,324	42,205,006
Merchandise	-	5,877,218	6,055,650	6,251,586	6,420,054	6,614,280	6,826,963	7,046,386	7,262,756	7,486,537	7,718,006	7,957,450	8,205,170	8,461,477	8,726,697
Other	-	7,836,291	8,074,200	8,335,448	8,560,073	8,819,040	9,102,617	9,395,181	9,683,675	9,982,049	10,290,674	10,609,933	10,940,227	11,281,970	11,635,595
Total Pay-One-Price	-	121,088,187	124,764,407	128,801,273	132,272,228	136,273,859	140,655,752	145,176,524	149,634,395	154,244,946	159,013,886	163,947,152	169,050,922	174,331,618	179,795,922
Cost of Goods Sold	-	12,739,220	13,125,981	13,550,684	13,915,850	14,336,846	14,797,848	15,273,461	15,742,457	16,227,515	16,729,237	17,248,246	17,785,194	18,340,756	18,915,634
Gross Margin	-	108,348,967	111,638,426	115,250,588	118,356,378	121,937,013	125,857,903	129,903,062	133,891,938	138,017,431	142,284,649	146,698,906	151,265,728	155,990,862	160,880,288
Staff Costs	9,086,385	43,786,171	44,442,964	45,109,608	45,786,252	46,473,046	47,170,142	47,877,694	48,595,859	49,324,797	50,064,669	50,815,639	51,577,874	52,351,542	53,136,815
Marketing Expenses	3,329,925	13,319,701	12,476,441	11,592,115	10,581,778	10,901,909	11,252,460	11,614,122	11,970,752	12,339,596	12,721,111	13,115,772	13,524,074	13,946,529	14,383,674
Repairs, Maintenance & Services	-	1,816,323	6,862,042	7,728,076	9,259,056	9,539,170	9,845,903	10,162,357	10,474,408	10,797,146	11,130,972	11,476,301	11,833,565	12,203,213	12,585,715
Utilities & Water	3,027,205	12,108,819	9,981,153	10,304,102	10,581,778	10,901,909	11,252,460	11,614,122	11,970,752	12,339,596	12,721,111	13,115,772	13,524,074	13,946,529	14,383,674
Admin & General	2,119,043	8,476,173	7,485,864	7,728,076	7,936,334	8,176,432	8,439,345	8,710,591	8,978,064	9,254,697	9,540,833	9,836,829	10,143,055	10,459,897	10,787,755
Insurance & Other	605,441	6,054,409	6,238,220	6,440,064	6,613,611	6,813,693	7,032,788	7,258,826	7,481,720	7,712,247	7,950,694	8,197,358	8,452,546	8,716,581	8,989,796
Total	18,167,999	85,561,596	87,486,684	88,902,041	90,758,810	92,806,158	94,993,097	97,237,712	99,471,554	101,768,079	104,129,390	106,557,671	109,055,187	111,624,292	114,267,429
EBITDA	(18,167,999)	22,787,371	24,151,742	26,348,548	27,597,568	29,130,855	30,864,806	32,665,351	34,420,385	36,249,352	38,155,259	40,141,235	42,210,540	44,366,570	46,612,859
EBITDA Margin	0.0%	18.8%	19.4%	20.5%	20.9%	21.4%	21.9%	22.5%	23.0%	23.5%	24.0%	24.5%	25.0%	25.4%	25.9%

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