



Dynamic Pricing, Tiered Pricing, and Further Visitor Options:  
Evaluations & Recommendations for the Indianapolis Zoo

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# Executive Summary

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The Capstone team set out to determine whether implementation of a tiered, dynamic pricing structure and the Total Adventure Package, plus existing membership options, together maximize access, revenue, and mission delivery at the Indianapolis Zoo. The Zoo's identification of these three pillars guided analyses of all existing and recommended programming and pricing. The Capstone team utilized data from the Zoo and outside sources to create a series of statistical models, analyses, and surveys. Final recommendations were arrived at in four programming areas: Admissions, Membership, TAP, and Special Programming.

Certain data collection and management activities were recommended multiple times in more than one programming group. The recommendation details were specific to each group and are outlined thoroughly in the body of the report. Data collection, particularly of qualitative data, is recommended in continued and new manners. We conclude that tracking data via surveys and electronic memberships will allow the Zoo to improve and gauge interest and willingness to pay, which would lead to improvement of access, revenue, and potentially mission delivery.

Marketing updates or changes are also recommended. We determined via analyzing similar attractions and researching best practices that changes to marketing could improve attendance, mission delivery, and access. Specifically, changing marketing materials to emphasize conservation, create brand consistency, and more explicitly explain programming (for example, with the Zooper Challenge) will lead to an increased achievement of programmatic goals.

The Capstone team utilized quantitative data and survey responses to analyze dynamic admission pricing's effect on overall revenue, access to various demographic groups, and attendance throughout the week. Findings were that the Indianapolis Zoo's new tiered pricing is working to stagger attendance without adversely affecting the access to any measured demographic group.

We utilized outside research, benchmarking, and best practices from similar zoos to create a list of recommendations for the Zoo's Membership program to increase revenue and access while also increasing emphasis on members role in conservation. We recommend: implementing a data collection and management plan, including an electronic Member Experience Survey and user accounts for members; enhancing low-income access through revising the Greater Opportunity (GO) Membership to include a partnership with Indianapolis Public Schools; increasing the number of Donor Memberships by nudging certain existing membership holders to the Keeper's Circle; improving Membership Marketing by enhancing communication of value, benefits, and options on the Zoo website; and increasing Member recognition and involvement, particularly on the Zoo campus.

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We used a variety of data to conduct three analyses of TAP: a financial analysis (how much revenue is generated?), a marketing analysis (who knows about it?), and a sustainability analysis (is TAP in a supportive long-term environment?). Final recommendations are: incorporate TAP into the standard admission dynamic pricing platform to maximize revenue; increase marketing of the TAP program to make the program more valuable to the Zoo and visitors; collect data to help efficiently increase spending on TAP's marketing mix; develop a strategic sustainability plan for TAP in keeping with sustainability literature; and create a brand identity system both internally and externally to minimize confusion and increase consistency for visitors.

In analyzing Special Events and Programming, we were guided by the Zoo's primary goals of targeting a new customer base, providing premium experiences to grow revenue, and flattening revenues through the calendar year. We used the results of an internal SWOT analysis and research of external zoos and amusement parks to identify potential programming and events. We recommend a series of new events and programming, including: a Chinese Lantern festival; Senior Days; Animal Stories; tours of the vet hospital; a Bring in the Spring event; and a ZooPerts event. All of these recommendations are described and justified in section 4 of the report.

# Admissions

## Overview

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The Capstone Team benchmarked financial metrics for regional zoos and determined the effects of pricing and other variables on attendance and demographic access at the Indianapolis Zoo from 2014 visitor survey data and historical annual attendance. 2014 was the first year with the Dynamic Pricing Model in effect, and the Capstone Team attempted to determine how the new model affected access for all demographics, shift attendance so that it occurs throughout the week as opposed to heavily on weekends, and change the admissions revenue stream of the Indianapolis Zoo. We found that dynamic pricing is keeping revenue streams comparable to other area zoos, it is not adversely affecting access to any major demographic groups, and attendance is being shifted as hoped by dynamic pricing.

### Recommendation and Findings

1. Admissions Revenues ratios and Expense coverage ratios are similar to comparable zoos in the region.
2. Dynamic pricing is not disproportionately affecting access to the Zoo for the studied demographics.
3. The zoo's dynamic pricing is affecting attendance without adversely affecting the studied demographics.
4. Expand question base and delivery options for surveys, e.g. take-home surveys, online surveys tied to online ticket sales, ticket-attached surveys, expansion to nonpatrons (mall goers, etc.)

The Capstone Team broke down the analysis into two major areas: Financial Findings, which assess the Zoo's Admissions Revenue performance compared to other Midwest zoos, and Statistical Findings, which explain the findings from the regression models the group created. After defining a group of similarly sized and priced regional zoos to use as benchmarks, we compared the Indianapolis Zoo on Admissions Revenue and Expense coverage. These are important considerations, as the Zoo does not have any government funding, as all others in our benchmarking group do. If the Zoo is not receiving substantial revenue from admissions, it cannot deliver on its mission.

In addition to total revenue, the Zoo is also concerned with assuring access to all demographic groups. Therefore, it became important to understand how the new dynamic pricing model would affect different groups. The Team ran regressions to determine dynamic price's impact on the demographic groups in the Zoo's 2014 Summer Survey, as well as on total daily attendance.

# Analysis

## Financial Findings

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To gauge whether dynamic pricing is resulting in increased revenue, access, and mission delivery, the Capstone Team first compiled financial information provided by the Zoo and the American Zoo Association (AZA) to examine the Indianapolis Zoo, as well as compiled financial data from Comparison Zoos<sup>1</sup> (from 2011-2013 annual reports, where available). Then, using the financial data, the Capstone team developed certain Admissions Revenue metrics to benchmark the Zoo to other Midwest zoos with similar attendance numbers. Benchmarking in Fiscal Year 2013 is important because it allows us to gauge Admissions Revenue performance as a percentage of all revenue prior to the implementation of dynamic pricing. This also allows us to determine whether or not there are areas of concern within admissions while also providing a baseline for assessing the impact of dynamic pricing on Admissions Revenue in the future.

### Revenue Metrics

Given that the Indianapolis Zoo does not receive government funding, which includes tax levies or government grants, Admissions Revenue<sup>2</sup> becomes even more important as a source of revenue to the Zoo. Because other zoos may be less reliant on their Admissions Revenue, a good way to gauge each organization's dependence on Admissions Revenue is to determine Admissions Revenue as a Percentage of Total Revenue.<sup>3</sup> The Indianapolis Zoo is high amongst regional averages at a rate of 32% as of 2013 (Figure 1.1). Compared to the other Regional Zoos, the Indianapolis Zoo's metric of Admissions Revenue of Total Revenue is similar to the comparison group's metric as well.

While official 2014 numbers have not been reported yet, AZA data suggest Admissions Revenue as a Percentage of Total Revenue stayed relatively similar to 2013 figures. Essentially, the Zoo did not take in a greater or lesser share of Total Revenue through Admissions from 2013 to 2014.

Another way to look at how much the Zoo should be relying on Admissions is by utilizing the Admissions and Government Funding Revenues as % of Total Revenue metric. Figure 1.2 shows that the Indianapolis Zoo, at 32%, has the lowest figure out of the Comparison Zoos in the region, with Toledo and Brookfield leading this metric at 73% and 56%, respectively. Without public funding, Indianapolis is forced to make up government revenue other zoos receive through other means, including increasing Admissions Revenue where possible.

<sup>1</sup> Comparison Zoos are Columbus, Cincinnati, Brookfield, Milwaukee, Detroit, Toledo.

<sup>2</sup> Admissions revenue includes one time use ticket sales and parking but does not include TAP revenue, membership or any other in-park revenue sources.

<sup>3</sup> All Metrics used are underlined, and have corresponding Figures and Tables found in Appendix 1.



Figure 1.1: 2013 Indianapolis Zoo

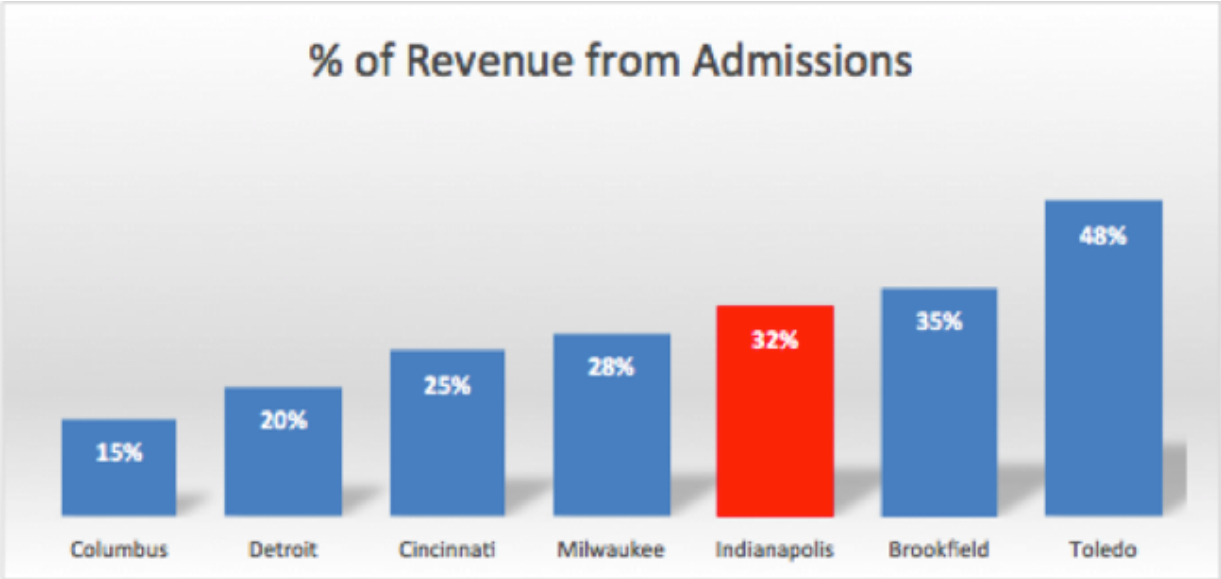
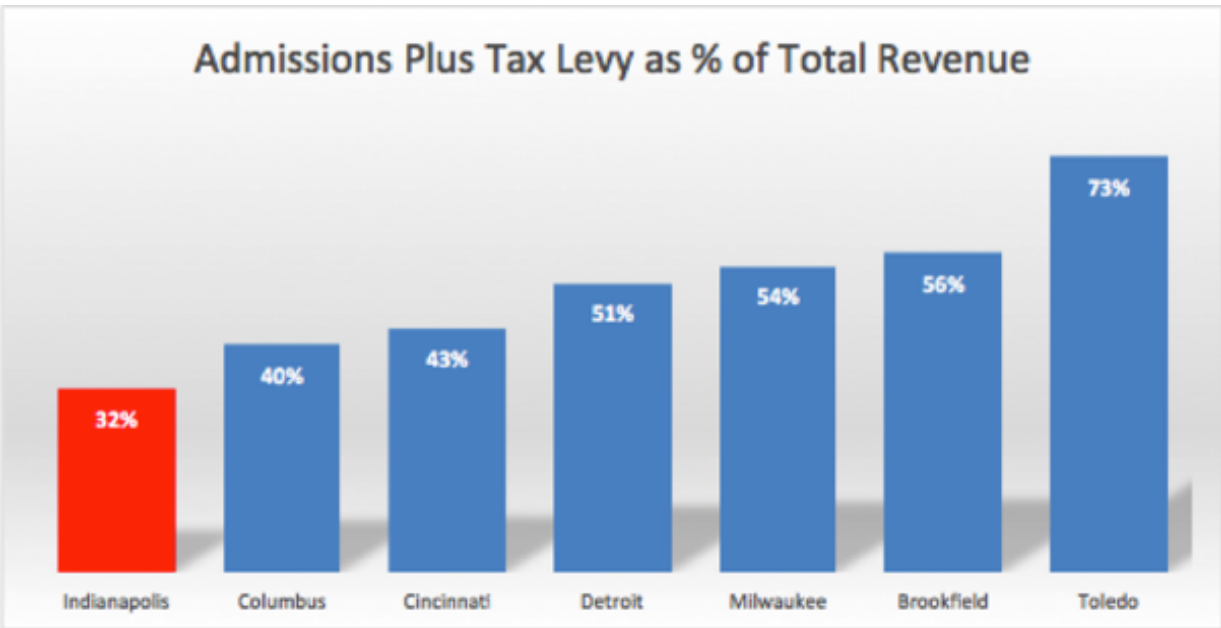


Figure 1.2: 2013 Indianapolis Zoo

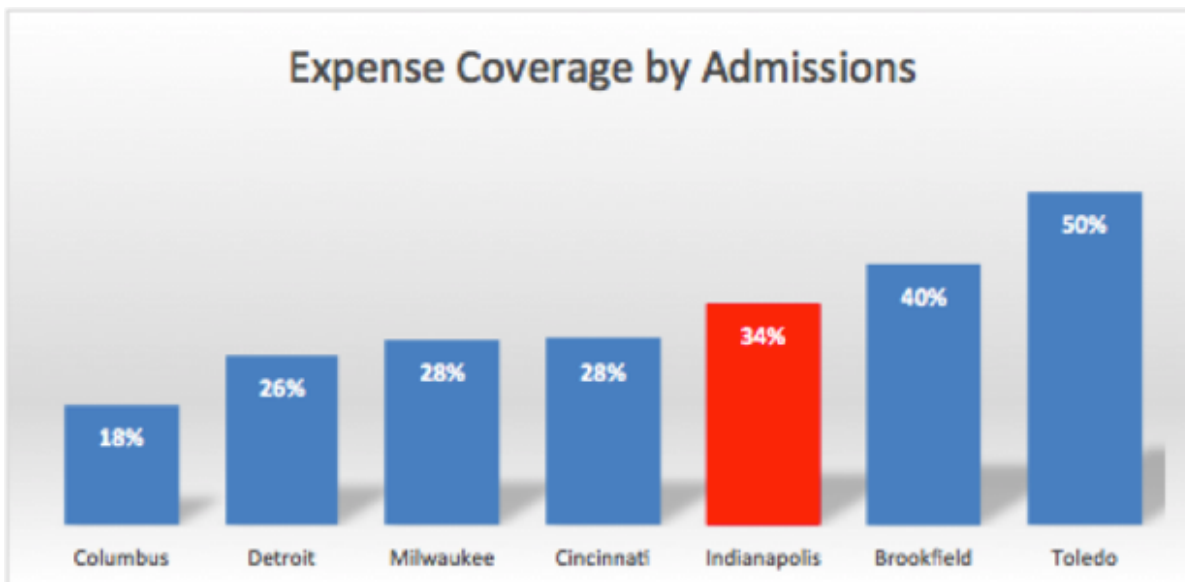


## Financial Findings

### Expense Ratios

Zoos can also determine Admissions Revenue reliance, and sufficiency, by the proportion of total expenses--including daily operations of the park, maintenance, and capital expenditure for new exhibits, buildings, and projects--that are covered by Admissions Revenue. Figure 1.3 shows the Expense Coverage by Admissions ratio. The metric shows the percentage of expenses<sup>4</sup> that can be covered using only Admissions Revenue. In 2013, Indianapolis had a 34% in Expense Coverage by Admissions ratio. This figure is comparable to other regional zoos, and does not suggest any major issues in the Zoo's capabilities to cover its Expenses with Admissions Revenue.

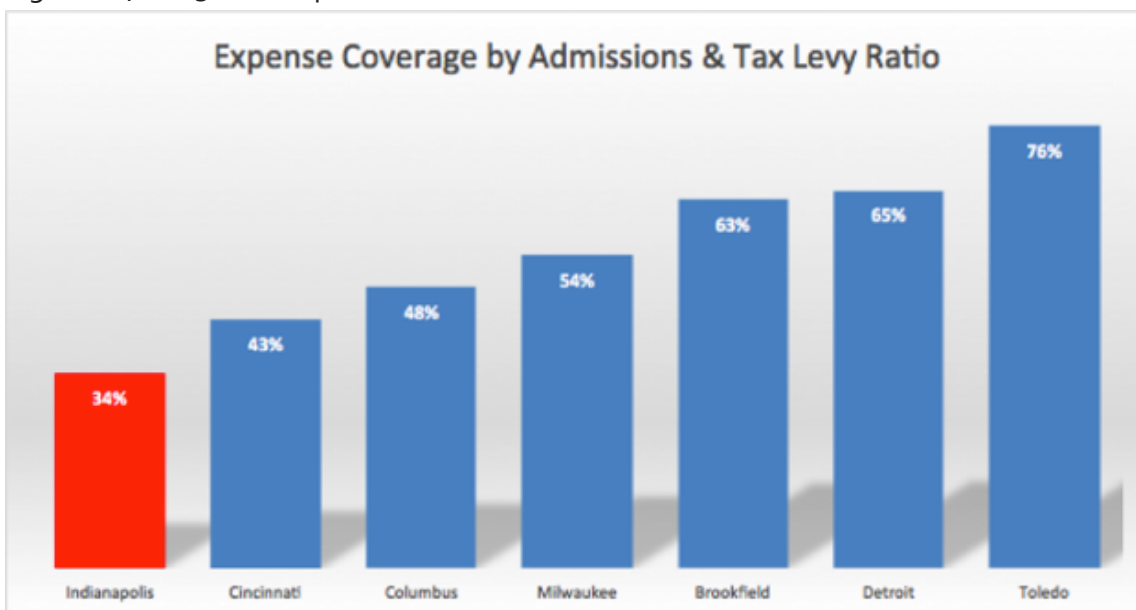
Figure 1.3: 2013 Indianapolis Zoo



<sup>4</sup> Expenses come from zoo annual financial reports. Expenses categories are comparable across zoos.

As with the metric utilized when analyzing total revenue, the Indianapolis Zoo's lack of government/public revenues will need to be covered elsewhere. Figure 1.4 shows Expense Coverage by Admissions & Government Revenues ratio, which determines the gap between Admissions Revenue and Tax Levies and the breakeven point. From this metric, Indianapolis has the lowest percentage (34%), while Toledo is the highest (76%). Essentially, what this suggests is that Admissions Revenues and Tax Levies will only cover 34% of Total Expenses, while other zoos in the region will cover an average of around 60% using Admissions Revenue and Tax Levies. This factor should only be a concern if Expense Coverage Ratios are perennially the lowest amongst comparison zoos, which would show that Admissions Revenues are not covering enough of the Zoo's expenses and that other revenue sources are not high enough to cover shortfalls.

Figure 1.4: 2013 Indianapolis Zoo



Overall, our financial performance metrics found that Indianapolis should not have any financial performance concerns as all the metrics used have suggested Indianapolis being in line with the other regional zoos.

## Statistical Findings

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In order to evaluate the impact of the Indianapolis Zoo's dynamic pricing on overall attendance as well as different demographic groups who patronize the Zoo, the Capstone Team developed statistical models to capture the impact of price on each demographic group included in the Zoo's 2014 Summer Survey, determine factors associated with total attendance, and determine pricing differentials' impact on revenue, access, and mission delivery. Utilizing results from these statistical findings, the Capstone Team developed a Price Elasticity of Demand model which examines whether current prices should be higher or lower in order to maximize revenue.

### Statistical Methodology

In order to evaluate the effect dynamic pricing had on each demographic group, we developed a regression model for each group. The regression model allowed us to determine both the magnitude and the significance of dynamic pricing on the included demographics. By including other variables (e.g. economic status and gender) we can account for changes in total attendance that are unrelated to price thereby increasing the precision of our estimate of price's impact on total attendance and the studied demographics. Overall, we included more than eighty other variables found in the survey to reduce the error in the model.

For the Total Attendance Model, we used the same initial approach, but added a few steps. Since we are interested in any factors associated with total attendance, we discarded variables that were not significantly related to total attendance.<sup>5</sup> We discarded the variables using a systematic approach that is described in the appendix. We also checked several assumptions that we made when conducting our statistical analyses, which are discussed in the limitations section.

### Demographic Analysis

Figures 1.5 a – e in Appendix 1 show that Zoo patrons from differing income demographic groups attend the Zoo on different days—with lower income patrons attending on weekdays, when prices are lower. This suggests that price might have an impact on which days the different income groups are attending the Zoo. However, our regression model indicates that demographic variables, such as income level, education, and ethnicity are not statistically significantly related to price (Table 1.1). These results allow us to conclude that the differences in attendance patterns seen in Figures 1.5 a - e are not statistically different from each other, and that price does not correlate to the included demographics of patrons attending the Zoo. Therefore, we can conclude that dynamic pricing is not restricting access to the Zoo in a manner that is specific to the examined demographic groups.

<sup>5</sup> It is important to discard insignificant variables, because their inclusion can alter the significant variables' estimates, decreasing their precision.

Table 1.1

**(1): How Demographics Are Affected By Price**

Variable (a)	Coeff. (b)	S.E. (c)	T-Stat (d)	P-Value (e)	[95% Conf. Interval] (f)	
Adult_Age1	-0.856	0.570	-1.500	0.134	-1.976	0.264
Adult_Age2	0.243	0.793	0.310	0.760	-1.315	1.801
Child_Age1	-0.083	0.185	-0.450	0.654	-0.447	0.280
Child_Age2	0.378	0.199	1.900	0.058	-0.013	0.768
Female_Adults	-0.017	0.028	-0.590	0.555	-0.072	0.039
Male_Adults	0.032	0.028	1.120	0.263	-0.024	0.087
Female_Children	-0.069	0.082	-0.840	0.401	-0.230	0.092
Male_Children	0.039	0.051	0.760	0.445	-0.062	0.140
Married	0.017	0.019	0.890	0.375	-0.021	0.054
White	-0.010	0.012	-0.800	0.425	-0.033	0.014
Black	-0.005	0.011	-0.470	0.639	-0.027	0.016
Hispanic	0.001	0.008	0.160	0.871	-0.014	0.017
Gender	-0.009	0.021	-0.410	0.685	-0.050	0.033
First_Visit	0.004	0.018	0.240	0.809	-0.032	0.041
Visits12	0.017	0.116	0.150	0.881	-0.211	0.246
Income	0.079	0.077	1.030	0.302	-0.071	0.230
Education	-0.035	0.061	-0.580	0.559	-0.155	0.084

(a) The dependent variable is the variable which is being influenced by the independent variables. In this table, we only show estimates effect on the dependent variable for one independent variable, price. However a total of ninety-nine independent variables were included. Each model was reduced to only statistically significant variables by discarding insignificant variables.

(b) For the continuous variables, the parameter estimates estimate the change in the dependent variable associated with a one-unit change in the independent variable. Because the binary, ordinal, and count variables are not significant we will not provide interpretations for those variables. Several models suffer from moderate near multicollinearity with Variance Inflation Factors over twenty. Therefore the actual standard errors are likely slightly inflated or deflated.

(c) These are the standard errors of the parameter estimates.

(d) These are the t-statistics associated with price for each of the dependent variables. They are the standardized parameter estimates and allow us to use the t-distribution - a probability distribution - to calculate the p-values

(e) The p-value is the probability of falsely claiming that an independent variable is having a statistically significant impact on the dependent variable. We consider p-values above .05 (i.e. the probability of falsely claiming an independent variable is having a statistically significant impact on the dependent variable is greater than 5%) to be too high. Thus any independent variable with a p-value greater than .05 will not be considered having a statistically significant impact on the dependent variable.

(f) These are the confidence intervals for the parameter estimates. We can say that we are 95% confident that the parameter estimate for price for that particular dependent variable is within the provided range.

## Statistical Findings

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### **Total Attendance Predictors**

We also developed a regression model that attempted to reveal dynamic price's impact on total daily attendance. The model found several factors more significantly affect total attendance than price. As shown in Table 1.2, our model estimates that on average, a one inch increase in precipitation lowers attendance anywhere between 2,571 and 3,047 people. During the summer months of the survey, a one degree increase in temperature is associated with a 100 to 154 person decrease in total daily attendance. Also, day of the week is an important indicator of attendance, with Saturday and Sunday showing increased attendance between 7,085 and 11,205 and 3,572 and 6,570 respectively. However, according to our model, as price decreases by \$1 we are 95% confident that the Zoo will see anywhere between a 336 and 670 increase in total daily attendance. The reverse can be said meaning that we are 95% confident that a \$1 increase in price will result in a 336 to 670 decrease in total daily attendance. As we stated earlier, price changes do not disproportionately affect different demographic groups. Therefore, the zoo's dynamic pricing is altering attendance without adversely affecting the studied demographics.

Table 1.2

Attendance	Coeff.	S.E.	T-Stat	P-Value	[95% Conf. Interval]	
Rain	-2809.367	120.9877	-23.22	0	-3046.922	-2571.812
MaxTemp	-127.4901	13.94454	-9.14	0	-154.8697	-100.1105
Saturday	9145.463	1049.249	8.72	0	7085.301	11205.62
Thursday	1755.968	203.8946	8.61	0	1355.629	2156.308
Friday	2031.489	276.7669	7.34	0	1488.067	2574.91
Sunday	5071.937	763.4584	6.64	0	3572.914	6570.96
Price	-503.6679	85.11336	-5.92	0	-670.7849	-336.5509
Wednesday	1329.949	225.1073	5.91	0	887.9588	1771.939
Wildlife_Cons	548.2588	114.6041	4.78	0	323.2378	773.2798
See_Dolphin	-562.9275	146.5378	-3.84	0	-850.6493	-275.2058
TV	494.8218	141.6409	3.49	0.001	216.715	772.9286
Learn_Interactive	272.6518	83.0315	3.28	0.001	109.6224	435.6811
Ads_Other	1769.917	542.4617	3.26	0.001	704.8125	2835.021
Demo_Jump	925.9047	293.2771	3.16	0.002	350.0656	1501.744
Zooper	1937.507	624.4136	3.1	0.002	711.493	3163.52
Be_outside	502.7382	172.4329	2.92	0.004	164.1725	841.3039
Jump	-49.38205	20.77137	-2.38	0.018	-90.16589	-8.598204
Demo_Tiger	448.3063	195.69	2.29	0.022	64.07596	832.5366
Adult_Age1	-9.66747	4.329925	-2.23	0.026	-18.16912	-1.165818
Overall_Zooper	-169.1592	76.17948	-2.22	0.027	-318.7349	-19.58353
Simon	-50.21047	24.13689	-2.08	0.038	-97.60237	-2.818558
_cons	24608.94	2103.36	11.7	0	20479.07	28738.81

With an  $F(21,679)=95.05, p<.0001$  we can conclude that there is a statistically significant relationship between one or more of the independent variables and total attendance. The adjusted  $R^2$  was .517 indicating that this model is capturing 52.2% of the variation in the daily total attendance of the Zoo. However, the Variance Inflation Factors (VIFs) for Price, Saturday over twenty, and the VIF for Sunday is over ten. VIFs over ten can cause moderate to severe inflation or deflation of the standard errors, reducing the parameter estimates precision.

## Statistical Findings

### Price Elasticity of Demand Models

From the figures derived from the Statistical Findings, we were able to calculate the Price Elasticity of Demand<sup>6</sup> (PED). This model allows us to determine whether the prices are too high or too low in a revenue optimization environment. Additionally, part of our goal is to smooth out attendance over the week during summer months, thus PED is a tool that allows us to gauge the appropriate level of weekly price increase/decrease without reducing revenue.

We estimated that average attendance in the summer months<sup>7</sup> of 2014 was 6,850 visitors per day, and the average daily price for the summer months was \$21. From the statistical model, we estimate a \$1 increase in price leads to decrease of between 336 and 670, discussed above. To determine the PED of a \$1 increase in price we run the following calculations:

$$PED = \left[ \frac{(6850 - 670) - 6850}{6850} \right] \div \left[ \frac{\$22 - \$21}{\$21} \right] = -2.0$$

$$PED = \left[ \frac{(6850 - 500) - 6850}{6850} \right] \div \left[ \frac{\$22 - \$21}{\$21} \right] = -1.5$$

$$PED = \left[ \frac{(6850 - 336) - 6850}{6850} \right] \div \left[ \frac{\$22 - \$21}{\$21} \right] = -1.0$$

Generally, when PED is elastic (greater than -1), prices should decrease in order to increase revenues, while if PED is inelastic (less than -1), prices should increase in order to increase revenues. Ultimately, the price effect estimate is just as likely to be near the upper limit ( a 670 visitor decrease for a \$1 increase in prices) as it is to be near the lower limit (a 336 visitor decrease for a \$1 increase in prices). As such, we cannot state that the average admissions price is elastic, as indicated by the upper bound calculation, because the calculation for the lower bound is indicative of a revenue maximizing elasticity of -1. While we cannot make a definitive determination for the PED, it is good to see that the estimate is potentially close to -1, which suggests that dynamic pricing is working well.

<sup>6</sup> Price Elasticity is calculated as (Percent Change in Quantity) / (Percent Change in Price)

<sup>7</sup> Summer Months are considered June 5 - August 1, which is the survey time period.



To illustrate this point, we created a Revenue Optimization Estimate using findings from our Statistical Analysis.<sup>8</sup> From the model, we see that the current price point in the summer months of \$21 is beyond the optimization point, which is between \$17 and \$18, as shown in Figures 1.6 a – c in Appendix 1. As summer prices currently stand, \$21 is in the elastic region of the graph (right of the optimal point), which suggests average daily prices should decrease in order to increase overall revenue. Had \$21 fallen in the inelastic region of the graph (left of the optimal point), the opposite would be true. When prices fall right on the optimal point, PED is considered unit elastic or 1. At that point, no price changes would be necessary if other factors are held constant.

### Statistical Limitations

Our results face some limitations. First, they are based on one year of data making it difficult to determine if the results are an anomaly or representative of trends. Nevertheless, dynamic pricing is less than a year old, leading us to believe our estimates provide the most accurate picture of the impact of dynamic pricing on total attendance and the studied demographics available. Second, because these data are based on survey results, they are susceptible to responder bias making it unclear if those who failed to respond were being adversely affected by changes in price. Because a professional organization administered the survey, however, we feel confident the agency did its best to minimize bias from non-respondents. Third, we have some concern over the precision of price's impact on total daily attendance because of high levels of near multicollinearity between the variable price and the variable weekend. When two or more variables are highly related, such as price and the weekend, it becomes unclear which variable is affecting total attendance. Therefore, even though price has a statistically significant impact on total attendance, we are unsure if that impact is coming from changes in price or whether it is the weekend, making us less confident in the exact estimate of price's impact on total daily attendance. The Zoo must also keep in mind the consulting group did not develop this survey specifically for a demographic analysis. Therefore, some demographics may be missing or reported inconsistently. The zoo can remedy this problem by looking at Table 1.3 in the appendix and deciding if any demographics that are important to it are missing and adding them accordingly. We also found that 30% of respondents failed to answer the income question, decreasing our confidence in price's effect on different income groups. Finally, the survey only included those who attended the zoo. Since we have no data on those who never attended the zoo because of dynamic pricing, those individuals could be systematically different from the survey respondents and disproportionately affected by dynamic pricing. Although these limitations necessarily qualify our results, we feel they do not undermine our general conclusions and recommendation.

<sup>8</sup> Price is Elastic if  $PED > 1$ ; Price is Inelastic if  $PED < 1$ ; Price is "Revenue Maximizing" if  $PED = 1$

# Membership

## Overview

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The Capstone Team's recommendations for improvement of the Zoo's Membership program include recommendations to achieve each of the overarching goals of maximizing revenue, access, and mission delivery. This report emphasizes methods to improve options for low-income access to the Zoo's programs, increase revenue from regular and donor Memberships, and provide Members with experiences that reinforce the Zoo's conservation mission.

### Recommendations

- Implement a Data Collection and Management Plan, including an electronic Member Experience Survey, a birthday recognition program, and user accounts for members.
- Enhance low-income access through revising the Greater Opportunity (GO) Membership to include a partnership with Indianapolis Public Schools, determining eligibility through existing low-income aid programs as determined by IPS, and increasing the GO Membership price from \$25 to \$45.
- Increase the number of Donor Memberships by acquiring new members and retaining current members, by focusing on the following recommendations:
  - o Identify good prospects, particularly for the Keeper's Circle;
  - o Focus on shifting Memberships from Regular-level to Donor-level Memberships.
  - o Emphasize the impact of Donor-level contributions on conservation efforts and change the name of the Gift Club to the Conservation Club.
  - o Improve Donor Membership benefits through a TAP Membership deal, a conservation photography club, and complimentary beverage coupons;
  - o Implement recruitment benefits for current members for referrals;
  - o Publish a donor membership comparison chart to demonstrate the benefits of donor memberships over regular memberships.
- Improve Membership Marketing by enhancing communication of value, benefits, and options on the Zoo website, and increasing Member recognition and involvement, particularly on the Zoo campus.

## Methodology

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The Capstone Team met with the Indianapolis Zoo's Director of Membership & Engagement, Marisol Gouveia, to identify available Membership data and the most important opportunities for the growth and development of the Zoo's Membership program. We found that our analysis would rely primarily on Membership program comparisons between the Indianapolis Zoo and other zoos throughout the Midwest region and the nation. We took a particularly close look at the Omaha Zoo's Membership program, using this industry leader's example to identify opportunities for improvement at the Indianapolis Zoo. Based on our comparisons and observations, we developed a series of recommendations that are described in detail in the sections that follow.

# Analysis

## Membership Data Collection & Management Plan

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The Capstone Team proposes an updated Data Collection and Management plan for the Zoo's Membership program. It will allow the Indianapolis Zoo to better understand its Members and ensure the Membership program continues to meet the Zoo's objective goals. Currently, the Zoo collects the following information from Members when they join or renew: names, address, phone, email, and the number of children under 21. The Zoo does not collect demographic data on its Members. We recommend the implementation of an optional survey for Members to provide valuable feedback that the Membership team can use to inform decision-making. Additional information about Members collected at registration of Membership or renewal of Membership provides a better understanding of Zoo Members. This plan incentivizes, rather than demands, Members to share additional information and feedback to gain insight in a non-intrusive manner.

## Membership Data Collection & Management Plan

### Membership Survey

As seen in the Morey Group Report, surveys can provide valuable feedback which can enforce current strategies or suggest new options. The implementation of a new Membership Survey will provide feedback regarding Members' experiences during visits and their opinions of Membership benefits.

Questions regarding Member demographics and experiences during visits can be adapted from the Summer Visitor Survey, using visits during the length of Membership rather than information from one specific visit. The Member survey also can include question topics specific to members, outlined below:

- General Questions
  - o "How long have you been a Member of the Indianapolis Zoo?"
    - Open-ended, In years
  - o "What type of Membership do you have?"
    - Single Answer Multiple Choice
  - o "How often do you, or your family, plan on visiting the Indianapolis Zoo?"
    - Single Answer Multiple choice, with "Other" open-ended option
    - Once a week; Once a month; Once every 3 months; etc.
  - o "Are there any children in your household, or that visit the Indianapolis Zoo with you?"
    - Dichotomous (Yes/No)
    - "If so, how many?"
      - Open-ended
- "If your Membership expired today would you consider renewing?"
  - Dichotomous (Yes/No), with option to include an open-ended reason
- Reasons for becoming a Member
  - o "What was your reason for purchasing an Indianapolis Zoo Membership?"
    - Multiple Answer Multiple choice with "Other" open-ended option
    - Money Savings; Additional Benefits; Interest in Conservation Efforts; etc.
- Rating of current Member benefits
  - o "How would you rate the benefits included in your current Membership package?"
    - Ratings on scale of 10 to 1 (Excellent to Poor)
  - o "Are there any additional benefits you feel should be included with Membership?"
    - Open-ended, potentially with suggestions

## Membership Data Collection & Management Plan

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To incentivize a response from Indianapolis Zoo members, respondents would have the option to be entered into a raffle contest after completing the Membership survey. The prize packages would offer something a typical Member does not experience during their visits, such as the Animal Art Adventure, Dolphin In-Water Adventure, or an entirely new experience. Entry would require optional disclosure of information, if the Member wanted to enter for a prize, while responses from the survey would be kept anonymous.

The Indianapolis Zoo can implement the survey using an electronic form to minimize processing costs. Conducting the survey in early fall allows the Zoo to gather responses after peak-visitation season. Members would be emailed a link to the electronic form which would expire in a week (or an alternate time period deemed appropriate by the Zoo). While survey results would be anonymous, IP address tracking could be utilized to prevent duplicate Member responses.

### Demographic Data Collection

Additional, optional, information fields during Membership registration would allow the Indianapolis Zoo to collect demographic and financial information from its Members without intruding on personal privacy.

Data on the household composition of Zoo Members, particularly the number of children using the Membership and the age distribution of children, could prove useful in Membership program decision-making. The registration form should include optional fields for children's first names and birthdates, which can allow the Zoo to send a birthday card, e-card, or message to Members' children, as practiced by the St. Louis Zoo. The optional disclosure of additional information in exchange for additional benefits allows the Zoo to collect useful information without appearing intrusive to Members.

## Membership Data Collection & Management Plan

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### User Accounts

User accounts are an opportunity to utilize the Indianapolis Zoo's website in a way that ensures up-to-date Member data and easy sharing of information with Members. We propose that the Indianapolis Zoo emulate the Omaha Zoo by creating space on the website that is specifically for members. User accounts provide Members with one location to manage their Membership, including activities such as: updating personal information, renewing and upgrading Memberships without waiting for their renewal time, or contacting the Membership office.

User accounts could also provide a Visit-Planning Dashboard. The proposed Visit-Planning Dashboard not only assists Members in planning their next visit to the Indianapolis Zoo, but also helps prevent overcrowding during peak times. The Dashboard would contain weather predictions, information about any special upcoming events, and projected daily attendance (such as the meter used on the online ticket purchasing form). In addition, the Dashboard provides a platform for Users to access past newsletters and an area to provide the Zoo feedback.

These user accounts could also be used to connect Zoo Members or patrons with special events and specific animals. People with user accounts could receive notifications about an animal they want to "follow"; get personalized emails referring to special events or discounted days; pay to have access to a special webcam on particular exhibits; or connect their online account to a smartphone app ("Zoo to You!") that offers an interactive map of the Zoo, pictures of the animals they are "following", and an audio tour guide. The implementation of this entire online system would require hiring technical staff, but it would update the Zoo's interactivity, create opportunities for people to remain connected even when they are not at the Zoo, and offer new ways of communicating to a greater population.

## Low-Income Access

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Currently, the Zoo offers the Greater Opportunity (GO) Membership, a partnership between 11 Head Start offices operated by Family Development Services in Marion County and the Zoo (Indianapolis Zoo, 2013). The GO Membership allows children in Head Start and their families to purchase discounted (\$25) Memberships (Indianapolis Zoo, 2015). A comparable Family Basic plan for two adults sharing the same household, including all children under age 21, costs \$136. Therefore, the GO Membership provides over a \$100 discount from other membership levels (Indianapolis Zoo, 2015). However, Family Development Services only serves 2,500 children (Family Development Services, 2015). Slightly more than seven percent of the Indianapolis Metropolitan Statistical Area's (MSA) population is between the ages of five-nine, over 128,000 residents (United States Census Bureau, 2015). A similar percentage and number of residents are under age five in the MSA (United States Census Bureau, 2015). Admittedly, not all children in this age group would qualify as low-income under federal poverty guidelines and related programs, but it does indicate that the Zoo could reach more of this population. The Zoo Director of Membership & Engagement, Marisol Gouveia, found there has not been a high take up rate among children and families eligible (M.Gouveia, personal communication, February 19, 2015). Additionally, students must enroll in Head Start with Family Development Services for eligibility. If students and their families age out of the program, go to another Head Start, or no longer qualify for the program, they cannot purchase the GO Membership. A new partnership could maximize Zoo attendance by expanding access to the GO Membership program at a new price point.

### Revising the GO Membership

Instead of partnering with Family Development Services, the Zoo should pursue a relationship with Indianapolis Public Schools (IPS). Partnering with IPS allows for expansion of the GO Membership to more students and families in the Indianapolis MSA. IPS enrolls 30,097 students, making it the second largest school district in the state (Indiana Department of Education, 2015). According to Marisol Gouveia, the Zoo focuses programming on families with children aged five to nine for Memberships (M.Gouveia, personal communication, February 19, 2015). This age group includes children who are most interested in the Zoo and its programming. Furthermore, reaching this age group allows the Zoo to deliver targeted conservation messaging, instilling those principles and practices in children and their families at a young age. This age group comprises students in kindergarten through third grade. The ideal revised GO Membership targets this same age group.



### Partnering with Indianapolis Public Schools

The Indianapolis Zoo should pilot the program with IPS kindergarten classes, reaching approximately 3,027 students in the Indianapolis Metro Area (Indiana Department of Education, 2015). This expansion increases access to the GO Membership program by over 500 students and their families.

Kindergarten students represent the start of Zoo's target age range for memberships, making them strong candidates for piloting the program. By piloting the program with this age group, the Zoo can target conservation messaging and related programming to instill a love for the Zoo, animal welfare, and conservation throughout their lives.

Contingent upon success of the partnership, the program would expand as kindergarten students matriculate into first grade, expanding the program to two cohorts of students. This cohort expansion will continue until the initial cohort reaches third grade, bringing the total grades eligible to four. Currently, kindergarten through third grade has the highest student enrollment by grade level in IPS. Based on 2014-2015 school year enrollment figures, GO Membership expansion would reach over 12,000 students and their families upon full implementation of the program, all within the target age range of Zoo Membership packages (Indiana Department of Education, 2015).

Additionally, partnering with IPS takes much of the responsibility for determining low-income eligibility away from the Zoo. Because IPS must collect enrollment forms for all students, they collect information regarding participation in low-income assistance programs, such as SNAP, TANF, and other qualifying programs. IPS does this data collection to determine eligibility for the federal Free and Reduced Price Lunch program through the Community Eligibility Provision permitted by the United States Department of Agriculture. Enrollment forms completed at the start of each year will indicate which students qualify for various public assistance programs and therefore the GO Membership as well. Roughly 75 percent of IPS students qualify for either free or reduced price meals, a percentage that the Zoo can extrapolate to each respective grade level (Indiana Department of Education, 2015).

## Low-Income Access

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### Eligibility

GO Memberships include the parent or guardian of the eligible child and any siblings under age 21 in the same household. This allows younger or older siblings to experience the Zoo through the GO Membership even if they are not part of a cohort-eligible class. According to a market analysis completed by CBRE, a Cincinnati, Ohio-based market research firm, the estimated 2014 average household size in the Indianapolis Metropolitan Statistical Area is 2.54 people (CBRE, 2014). This statistic means that, on average, GO Membership-eligible families would have roughly three members. These recommendations note that families targeted for GO Memberships may have higher average household size than indicated by this market analysis. The Capstone Group is confident that this general trend will hold for eligible families, acknowledging that many target families are likely single-parent households. Further, discussions with the Zoo's Membership staff have indicated that the average Grandparent Membership likely brings more than 2.54 visitors, meaning that the Zoo can absorb additional Members from the GO Membership (M.Gouveia, personal communication, February 19, 2015).

### Pricing

The Zoo prices the current GO Membership at \$25. To balance revenue and access for the GO Membership and the interests of the Zoo and potential Members, pricing needs to change. Reviewing the 2014 average adult admission price under the dynamic pricing model, prices from March through December admission prices were evaluated. The pricing analysis found the high price (\$29.95), the low price (\$8.70), the median price (\$17.95), and the average price (\$17.73). Noting that adult and children's admission prices fluctuate between a \$3.50 to \$5.25 change in price, the analysis assumes an average price difference of \$4 for our GO Membership pricing.

Using the average household size of 2.54 and rounding to one adult and two children as the target GO Membership baseline, calculations assume that each Member will attend the Zoo at least once using their Membership. Using median ticket prices of \$17.95 (adult) and a \$13.95 (child), the Capstone Group recommends pricing the GO Membership at \$45. All other Zoo Memberships cost more than twice the price of a GO Membership. A \$45 GO Membership price represents an increase in price of the existing GO Membership, but remains much more affordable than any existing Membership plan.

The revised GO Membership should be unveiled in partnership with IPS. Through existing Zoo field trips sponsored by IPS, students in the initial kindergarten cohort will attend a class trip at the Zoo. Following their visit to the Zoo, where they will visit the animals and receive quality, age-appropriate conservation messaging, eligible students and their families will receive a brochure sharing the details of the GO Membership. These brochures will be created by the Zoo but disseminated by IPS. Students and their families must elect to participate in the Membership program individually. Once they elect to participate in the program, the Membership would act like any other, good for a calendar year from date of purchase. Members of the initial kindergarten cohort will receive renewal reminders contingent upon low-income status from IPS as first graders. The cohort process will continue as long as it is successful and desired, reaching full implementation when the initial cohort enters third grade, a four-year implementation time frame. The expansion can extend beyond traditional IPS students to those attending public charter schools, depending on program adoption and success.

Proposed GO Membership Timeline	
May 2015 – August 2015	Zoo analyzes Capstone Group recommendations and pursues relationship with Indianapolis Public Schools
August 2015 – September 2015	Indianapolis Public Schools collects enrollment documents and verifies low-income status. IPS reports a raw number of eligible students to the Zoo.
September 2015	IPS Kindergarten classes attend Indianapolis Zoo field trips. Students and their families receive GO Membership eligibility information created by the Zoo and distributed by IPS. IPS maintains records of eligible students internally.
September 2015 – December 2015	IPS students and families elect to participate in GO Membership program. The Zoo verifies eligibility with IPS upon receipt of Membership application from the eligible family.
Summer 2016	<p>A GO Member survey is issued to families who participated in the Membership program. This survey will measure attitudes towards the GO Membership program as well as conservation understanding.</p> <p>The Zoo will conduct a full analysis of program participation, including total number of Memberships, children reached in the target age range, number of visits, and economic cost of the program. This can be done in tandem with a survey and analysis of the entire Membership program. IPS may wish to evaluate parental engagement and academic results of students participating in the program.</p> <p>Reminders go out to existing GO members to renew their Membership contingent upon low-income status</p>
August 2016 – September 2016	IPS enrolls and verifies income status for first grade and kindergarten cohorts. This includes all currently enrolled students.
September 2016	IPS kindergarten and first grade classes attend Indianapolis Zoo field trips; students and families receive GO Membership eligibility information
September 2016– December 2016	Indianapolis Public School students and families elect to participate in GO Membership program. Evaluation program repeats.

## Donor Memberships

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Increasing the number of donor Memberships each year increases the Zoo's annual revenue and shares the Zoo's mission with constituents who greatly value both attendance at the Zoo and its conservation efforts.

### New Donor Member Acquisition

New Donor Member acquisitions increase the Indianapolis Zoo's annual revenue from donor Memberships by acquiring new donor Members and retaining current donor Members. Identifying good prospects for donor Memberships, particularly at the Keeper's Circle level ranks high in priority for the Zoo. We identified the following constituents to consider as prospective donor Members. With these constituent groups in mind, the recommendations that follow can be implemented to acquire and retain these donor Members.

- *Long time Family Basic or Family Plus 2 Members:* These Members represent parents whose children have aged-out of the prime Zoo attendance years. These Members continue to renew their Memberships because of a positive relationship with the Zoo and its mission. If these Members also have the capacity to give, they might be excellent prospects for conversion to Keeper's Circle Memberships.
- *Members who made additional contributions last year:* Current Zoo Members who made contributions through campaigns like the annual appeal demonstrate a philanthropic interest in the Zoo. Especially those Members who made gifts near the \$116 level (the monetary value of an upgrade to the Keeper's Circle) should be cultivated for an upgrade to the donor Membership level. Through their philanthropic behavior, these individuals display an interest in supporting animal conservation.
- *Associate Council Members:* Associate Council Members who continue to renew their Membership or those who start families could be good prospects for donor Membership. Even if an Associate Council Member upgrades to the Keeper's Circle level or above, they should be able to remain a part of the Associate Council as long as they wish to participate.
- *Other:* Long-time individual Members and Members with high income.

### Regular-level to Donor-level Membership Shifts

A targeted approach by the Indianapolis Zoo to increase the number of donor Memberships purchased can increase its annual revenue and expand its mission outreach. Donor-level Memberships have high potential to generate a larger and more stable revenue stream, enhance mission delivery, and encourage more engaged and invested Members.

According to the Zoo's Membership and Donor Household data for 2013 and 2014, the Zoo includes in its donor-level Membership category, the Gift Club (Keeper's Circle, Curator's Circle, and Director's Circle), the Nussbaum Society, and the Associate Council; and in its regular-level Membership category, the Family Plus 2 level, Grandparent Plus 2, Individual and Guest, Family Basic, Grandparent Basic, and Individual Plus 4.

By targeting regular-level Members for donor-level Memberships, the Zoo enhances its relationship with its most committed Members, while simultaneously increasing revenue and delivering its mission. The assumptions for the revenue projections for 2015 given a shift from regular-level to donor-level Memberships include the following:

- (1) The base 2015 revenue projections are calculated with the same number of annual Memberships purchased at each level;
- (2) The shift from regular-level to donor-level Memberships will come from the Family Plus 2 level to the Keeper's Circle level.

The justification behind isolating the shift from regular-level to donor-level Membership within the Family Plus 2 level and the Keeper's Circle level is that the Family Plus 2 level is at the highest rate tier for the regular-level, and the Keeper's Circle level is at the lowest-rate tier for the donor-level.

The total Keeper's Circle Memberships sold in 2014 represented 1.5% of the total Memberships sold, and total revenue from Memberships sold was \$8,827,244, as illustrated in Table 2.3. An increase of the Keeper's Circle from 1.5% to 3% of total Memberships sold would result in an overall increase in revenue by \$84,978, to \$8,912,222 (See Table 2.4). An increase of the Keeper's Circle to 5% of total Memberships sold results in an overall increase in revenue by \$198,282, to \$9,025,526, as illustrated by Table 2.5. Increasing the Keeper's Circle to 8% of total Memberships sold results in an overall increase in revenue by \$1,617,580, to \$10,444,824, as illustrated by Table 2.6. This analysis suggests a method by which the Zoo can increase revenue without having to add new members, simply by shifting existing regular-level Members to donor-level Memberships. The Zoo can begin by focusing on the 3% goal, as this is a more feasible option in the short-term, through targeted donor-level Membership marketing plans detailed below.

In addition to acquiring new donor Members, the Zoo should focus on retention. In both acquiring and retaining donor Members, the Zoo's emphasis on both the conservation message as well as the improved benefits and value of a donor Membership will appeal to this audience. The following recommendations propose specific strategies to accomplish these goals.

## Donor Memberships

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### Emphasize the Conservation Message

The Indianapolis Zoo should change the name of its Keeper's Circle, Curator's Circle, and Director's Circle Memberships from the "Gift Club" to the "Conservation Club." All communication surrounding these Memberships should emphasize the impact of a donor Membership—revenue provided furthers the conservation mission of the Indianapolis Zoo.

### *Monetize the Impact of a Donor Membership*

In Conservation Club solicitation letters and/or flyers, the impact of a Membership should be clearly stated in a specific dollar amount. The broad issue of animal conservation may be difficult for a prospective donor to conceptualize. Unlike a regular Membership, a prospective donor Member cannot immediately read into the impact of their gift. If asked to join at the \$300 level, a donor Member should understand what their \$116 tax-deductible donation can accomplish.

### *Add Conservation Themed Content to Website*

A strength of other zoos' websites is a wealth of media content that clearly shows the conservation impact of the zoo. In particular, the San Diego Zoo's video page displays an impressive example to emulate (San Diego Zoo, 2015). Website visitors have the ability to watch a variety of "animal-cams" to check on what their favorite zoo animal is up to. In addition, the San Diego Zoo publishes videos that capture their conservation efforts in a way that also demonstrates their case for support. The Indianapolis Zoo should consider a similar approach as a way to further communicate its mission and provide quality content for its potential or current Members.

### Improve Donor Membership Benefits

Zoo donor Membership currently offers a base set of benefits with four ride tickets offered at the \$600 Curator's Circle level and a free stroller rental offered at the \$900 level. An increase from a \$184 Family Plus 2 Membership to a \$300 Keeper's Circle Membership currently offers the following additional benefits:

- Two additional guests
- Discounted tickets to Zoobilation
- Three early Saturday admissions per year
- Invitations to exclusive donor events
- Subscription to Inside the Zoo magazine

The major benefit to the Zoo offered by a conversion to Keeper's Circle is the tax-deductible contribution to animal conservation of at least \$116. While all of these benefits certainly add value to a donor Membership, finding a few additional benefits to add at each level will increase the perceived value of a donor Membership upgrade. In the following section we propose the addition of three additional benefits: a TAP Membership Deal, the Conservation Photography Club, and Complimentary Beverage Coupons.

#### *TAP Membership Deal*

With the addition of the Total Adventure Package (TAP), the Zoo could offer unlimited use of this value-added package to its donor Members for an annual fee on top of the existing Donor Membership price (a Keeper's Circle Donor would pay \$300 per year for the Membership and add on this offer for an additional fee). The Omaha Zoo currently operates a similar program for its donor Members, offering unlimited rides to these Members for an additional \$139 per year. An offer of unlimited TAP Membership for an additional cost of around \$140 at the Keeper's, Curator's, and Director's Circle levels may convince Members considering making the upgrade to the donor Membership level. The appropriate price for this proposed TAP Membership deal should be determined internally by the Zoo. In our later analysis of TAP specifically, we suggest the implementation of dynamic pricing for regular TAP tickets. An offer of unlimited TAP Membership for Donor Members will require that the Zoo find an appropriate price level to balance the need to maximize revenue while encouraging visitors to move throughout the Zoo.

#### *Conservation Photography Club*

It is clear from the Indianapolis Zoo website that many visitors, staff and board members enjoy photography. Great animal photography provides the visual content necessary for effective marketing campaigns. While the Zoo currently encourages photography, the Zoo does not operate a system for designated photography sessions with guaranteed access to clear shots of exhibits and the animals. At the National Zoo in Washington D.C., Members have the option to join the "Friends of the National Zoo Photography Club." This club provides regular meetings where Members receive access to roped-off areas to photograph the animals. A skilled photographer provides Members guidance and support.

## Donor Memberships

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A similar club at the Indianapolis Zoo could connect Zoo Members with each other as well as with the Zoo and its incredible animals. A Conservation Photography Club offered to donor Members for free and all other Members for \$20 annually provides a great experience for adult Members looking to practice or improve their photography skills. Members could interact with donor Members, staff, and volunteer photography experts. The photos taken by Conservation Photography Club Members could be prominently showcased at the Zoo, the Zoo website and Zoo social media accounts. This program could be integrated with the Zoo's trips to Africa and elsewhere, adding depth to these committed Member's linkage to the Zoo.

### *Complimentary Beverage Coupons*

Free beverages offered by the Zoo are an inexpensive way to add value to Donor Memberships. A limited number of complimentary beverages at each Donor Membership level could increase the perceived benefit of Donor Membership. By increasing the number of beverages provided with each donor Membership level, Members will receive a little more benefit for their increased level of giving. The Zoo could also consider offering a discount on food and additional beverages for Donor Members or even all Members. Similar benefits are found at many other zoos and museums throughout the country. For example, the National Zoo offers free fountain drink coupons and a 10% discount coupon on food to its members at most levels.

### Recruitment Benefits for Current Members

A great source of donor Member prospects are current donor Members themselves. A program providing incentives to these current donor Members to recruit their own contacts could bring in valuable new donor Members who would enjoy a deeper connection with the Zoo. Incentives for donor Member recruitment could take the form of special events, recognition for recruitment efforts, a discount code for future Membership renewals, or a free TAP Membership for a designated number of referrals.

### Donor Membership Comparison Chart

A comparison chart in Appendix 2 demonstrates how the donor Memberships compare to one of the "best value" regular Memberships. This chart provides a side-by-side analysis of Member benefits. The table illustrates the "step-up" in value and benefits from a regular Membership to each level of donor Memberships, simplifying a potential or renewing Member's decision-making process. We include the proposed additional benefits to illustrate how these will compare if these recommendations are adopted.



Enhanced marketing of Membership options, benefits, and value will improve Member retention and new Member acquisition.

### Clear Communication of Value, Options, and Benefits

According to the Indianapolis Zoo Membership Director, a common complaint received from Members is related to a feeling that they are not getting much value from their Membership. To respond, the Zoo could include a concrete comparison of the cost and value of memberships and comparable ticketed visits – for example, highlighting that the value of a family Membership equals the cost of bringing a family of four to the Zoo more than two times per year at the average in-season rate.

When a potential Zoo Member visits the Zoo’s website, the Membership Page should provide easy access to every piece of information a visitor might need in order to make the decision to join the Zoo. Currently, a partial list of Member benefits appears along the right edge of the website with the option to click to display a full list of benefits. The Membership level options are not visible on the main Membership Page until the visitor clicks “Join Now,” “Renew Now,” or “Give Gift,” thus not revealing the value of a Membership package until after an individual decides to join the Zoo.

The available Membership options should be one of the first or second things a website visitor sees on the Membership Page. The National Zoo’s website (National Zoo, 2015) showcases how to make Membership options front and center to visitors. It is very intuitive for a website visitor to click through each Membership option and learn about the associated benefits. The National Zoo also provides a “Compare Membership Levels” PDF which clearly and noticeably communicates the distinctions between different Membership levels. This useful tool provides a view of all Membership options and benefits side-by-side.

The Indianapolis Zoo can improve the main Membership Page of the website by listing Membership options and benefits in a way that does not require web visitors to click to any different locations.

The Zoo also should include all relevant information related to Membership add-ons. For example, a potential or renewing Member should be able to see clearly on the website and other membership marketing materials, how to add a caregiver option to a Membership. Currently, interested patrons must seek information on their own about this option—if a potential member doesn’t realize this option exists, it could prevent them from making an informed decision about Membership. The Associate Council, though technically a donor category, could also be marketed more clearly on the Zoo website’s Membership Page. Currently, information about the Associate Council is found on the Support the Zoo Page. The inclusion of this society for young professionals on the Membership Page could increase the pool of interested patrons.

## Membership Recognition

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Increased Member recognition and involvement will expand and maintain the Zoo's Membership program. Currently, the Zoo offers Members exclusive benefits. These include special events, discounts, newsletters and other offers. Many of these benefits, such as Member appreciation and recognition days and early morning walk-about receive positive Member feedback. The Zoo recognizes all donors each year in the Zoo's Annual Report. The Zoo recognizes higher level donors by displaying their names in various areas of the Zoo itself. These displays of Member recognition and appreciation entice visitors to purchase Memberships and donate. They also help keep existing Members.

The Zoo can simultaneously improve Member recognition and promote its conservation message. The Zoo should take an approach that not only promotes its mission and educates Members, but also makes the Membership experience more personalized and engaging, both between the Zoo and its Members, and between the Members themselves. Crucial to this change in strategy is collecting and maintaining records of Member demographics. This draws on the previously described Data Collection and Management Plan, which enables the Zoo to conduct Member outreach in a more personalized form.

The Zoo can achieve a personalized and engaging Membership experience by reaching out to Members at positive, memorable moments in their life, and by involving them in fun and unique activities. For example, as mentioned earlier in the report, children could receive personalized "Happy Birthday" emails from animals at the Zoo. The Zoo can also profile certain Zoo animals and have Members opt-in to receive updates about a particular animal's life. These interactions would give the Zoo a closer connection to Members, while also providing Members with educational information and promoting the Zoo's conservation message.

Another opportunity to enhance the Membership experience is to encourage the development of an engaging, collegial, and even competitive relationship between Members. Organizing contests or periodic quizzes gives Members the opportunity to be recognized for their "Zoo acumen" and to win prizes. Soliciting editorials from Members, such as "favorite zoo moments" or other opinions, allows Members to publish and share with other Members. The Zoo establishing a Member-led committee that could organize events and conduct outreach allows Members to have the opportunity to take a more active role in helping the Zoo promote its conservation message. Current Members may be the Zoo's best advocates in recruiting new Members. The Zoo maintaining an online forum that gives Members a space to discuss the Zoo and post questions makes the Membership experience more dynamic, gives Members their own community and a voice therein, and enables the Zoo to better hear Members' concerns and respond to them quickly and efficiently.

Other zoos we examined do not appear to offer a very dynamic Membership experience. Maintaining a virtual space for members to converse and develop a community will improve retention by making Members feel invested in the Zoo's future and empowered in improving the Zoo and the Membership experience. Improved Member acknowledgment and appreciation will strengthen the bonds between the Zoo and its Members, and will improve recruitment, as Members will be more inclined and enthusiastic to encourage people to join. In terms of staff resources, this would probably require at least one dedicated staff member to oversee and maintain these efforts. The Zoo should consider this a priority, since without fostering a sense of community and responsibility among members, the Zoo remains just another leisure option for Members. Rather than simply providing another possible entertainment attraction, the Zoo should aim to inspire its Members to take the Zoo's mission seriously, to spread the Zoo's mission, and to take an active role in preserving the Zoo's values. This can only be achieved if Members are empowered and believe they can actually play a meaningful role in the Zoo's future. Building a community is crucial to this, as it will provide a network of support where Members can share both their ideas and their enthusiasm.

# Total Adventure Package

## Overview

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The Total Adventure Package (TAP) is a Zoo admission ticket upgrade which allows unlimited access to rides on all attractions, bird and giraffe animal feedings, and the interactive Zooper Challenge scavenger hunt. TAP costs \$13 (\$10 while the Skyline is not in operation) and purchasers receive a wristband, which allows access to the attractions. This price was determined by summing the total cost of all the attractions at a 10% discount. The Indianapolis Zoo created the TAP two years ago in order to capitalize on visitors willing to pay more for a premium experience at the Zoo and to distribute people across the Zoo's campus. In its second year, the Skyride and Zooper Challenge were added to the package as planned in the Zoo's 2014 business plan; the program successfully increased Zoo revenue by 20% in ride areas and average guest spending reached \$1.60 per guest. The program is very successful in terms of customer satisfaction; Indianapolis Zoo's 2014 visitor survey report revealed that among those who have purchased TAP, 81% rated the program as excellent and 79% rated the Zooper Challenge as excellent. The Capstone Team examined TAP's impact on revenue, access, and mission delivery maximization by conducting three separate analyses: a financial analysis, a marketing analysis, and a sustainability analysis.

## Recommendations

1. Incorporate TAP into the standard admission dynamic pricing platform – i.e., price it as a fixed percentage of the dynamic price -- to maximize revenue.
2. Increase marketing of the TAP program through a series of live and online promotional efforts whose impact is easily measured
3. Collect some additional data on how visitors do/do not learn of and experience TAP in order to help efficiently increase spending on TAP's marketing mix and to:
  - a. Increase the number of individuals purchasing TAP
  - b. Increase the overall satisfaction of the TAP program
4. Develop a strategic sustainability plan for TAP in keeping with sustainability literature.
5. Create a brand identity system both internally and externally to minimize confusion and increase consistency in promoting and evaluating TAP.

As one of the largest privately funded zoos in the United States, the Indianapolis Zoo has devoted substantial efforts to ensure the organization's sustainable growth over time. "Manag[ing] operations prudently to ensure the continuation and sustainability of the mission" is listed as the most important strategic goal in the organization's GuideStar Exchange Charting Impact Report. In order to achieve sustainability, the Zoo's strategic plan explored the creation of a program that will increase operation efficiency, enhance attendance rates, and advance the Zoo's mission. The Total Advantage Package (TAP) was the result of this planning process.

The sustainability of a new program, like TAP, concerns many analysts because of the considerable time and effort required to build and implement new programs. Measuring the effect of the program is necessary and useful for determining if the program is able to provide benefits to the recipients and maintain its activities over time (Schell et al., 2013). Accordingly, program evaluation studies tend to incorporate program sustainability assessments.

In 2013, 42.5% of all the attractions, animal feedings, and rides taken were by visitors to the Zoo were taken through a TAP wristband (312,678 WB / 734,399 Total) while in 2014 only 37.4% of all the attractions, animal feedings, and rides taken were by people with a TAP wristband (316,428 WB/ 845,876 Total). These figures are displayed below in graphs 3.1 and 3.2. From 2013 to 2014, a higher percentage of attendees purchased TAP (9%) and the total number of TAP wristbands sold increased by approximately 44,000, though the total number of attractions, animal feedings, and rides used by TAP users only rose by 4,000, or a 1% increase. During the same time, the number of attractions, animal feedings, and rides taken by non-wristband users rose by 107,727, or a 25% increase. Furthermore, the number of attractions, animal feedings, and rides per wristband user decreased from an average of 4.5 (312,678 WB Rides/69,000 WB Sold) in 2013 to an average of 2.8 (316,428 WB Rides /113,623 WB Sold) in 2014. These uses do not include data from the Zooper Challenge.<sup>1</sup>

1: All data provided by the Indianapolis Zoo

## Methodology

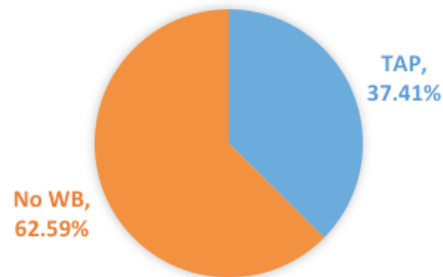
Chart 3.1	2013	2014	% Change
TAP Purchases	69,000	113,623	44%
TAP Purchases as % of Total Attendance	6.7%	6.9%	2.7%
TAP Attractions, animal feedings, and rides	312,678	316,428	1%
Non-TAP Attractions, animal feedings, and rides	421,721	529,448	25%
Total Attractions, animal feedings, and rides	734,399	845,876	15%
Attractions, animal feedings, and rides per TAP Purchase	4.5	2.8	-37%

2013 - PERCENT OF TOTAL RIDES FOR TAP AND NON-TAP USERS



Graph 3.1

2014 - PERCENT OF TOTAL RIDES FOR TAP AND NON-TAP USERS



Graph 3.2

The analysis of TAP riders for each attraction reveals three notable trends. First, the percent of TAP riders has decreased for amusement rides from 2013 to 2014 (Skyline excluded). Second, the percent of TAP users has increased for animal feedings (Giraffe excluded; Chart 3.1). Finally, number of TAP buyers who go to the 4-D theatre has significantly decreased.

Chart 3.2

Number of TAP Users at Each Attraction as a Percent of Total Users

Attraction	2013	2014	% Change
Train	23.52%	21.78%	-1.73%
Carousel	43.24%	33.50%	-9.73%
Coaster	52.22%	39.59%	-12.63%
4-D Theatre	60.41%	33.45%	-26.97%
Budgie	57.48%	64.87%	7.39%
Lorikeet	69.10%	73.99%	4.89%

As described above, the 4-D theatre saw a significant drop (26.87%) in the percent of visitors who were TAP users from 2013 to 2014. The total number of TAP users who went to the 4-D theatre decreased by 45,000.

Chart 3.3

4-D Theatre

	2013	2014	% Change
TAP Users	70,750	25,343	-179.17%
Non-TAP Users	46,359	50,429	8.07%
Total TAP Users	117,109	75,772	-54.55%

To perform such an analysis of TAP, we first examined the data on TAP purchase and use for 2013-14.

113,623 TAP Packages were sold in 2014, which equaled 9% of total attendance and showed a 2.3% increase from 2013 (69,000, 6.7% of attendance). In 2014, 63% of the purchasers who bought TAP were non-Members (71,753), 27% were Members (30,581), and 10% picked up a complimentary wristband from the gift shop (11,289).

Using these data as background, we analyzed how to increase revenue from TAP, how to get more people aware of and correctly using TAP, and how to ensure TAP will exist successfully long-term.

# Analysis

## Quantitative Analysis

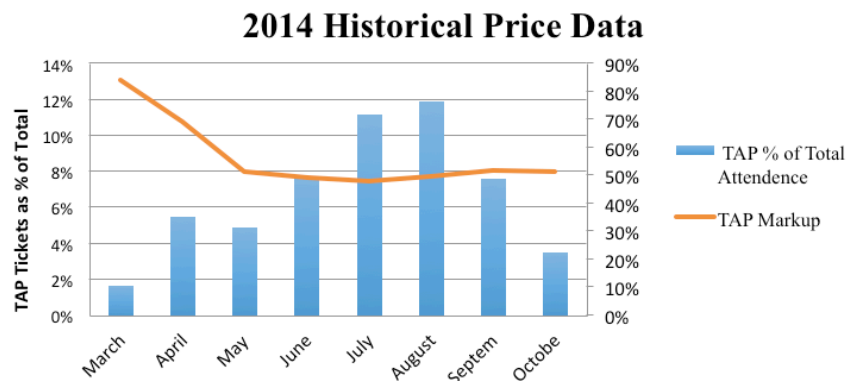
This section outlines a method for maximizing revenue generated from Total Adventure Package sales by incorporating TAP into the Zoo's standard admission dynamic pricing platform. Our suggested pricing strategy enables the Indianapolis Zoo to consistently segment the consumer market and differentiate between those visitors willing and unwilling to pay more for a premium experience, while simultaneously maintaining the quality of the Zoo experience for all patrons. Our analysis is based on statistical modeling of 2014 data to achieve maximum revenue generation from TAP sales.

The current TAP pricing method places an additional fixed dollar amount to the dynamic Standard Admission Package (SAP) price, resulting in a fluctuating markup percentage for TAP throughout the year.

The "markup" is defined as:

$$\text{Markup} = (\text{TAP Price} + \text{Standard Admission Price}) / \text{Standard Admission Price}$$

A fluctuating TAP markup is not the optimal pricing strategy for revenue maximization because of consumer bias towards relative prices. This consumer behavior is referred to as "context-dependent willingness to pay," a phenomenon consistent in economic literature (Azar, 2011; Bordalo, 2012). The effect is demonstrated by the percentage of customers purchasing TAP as a percentage of total attendance. The following figure outlines the fluctuation of TAP purchases as a percent of total admission throughout the months TAP is offered.





The effect of customer bias towards the relative difference of TAP to the standard admission price was suboptimal revenue generation when the standard admission price was at its highest and lowest levels. When the markup percentage for TAP was high in March and April, the percentage of attendees purchasing TAP was low: 1% to 5.5%. When the markup percentage decreased during the summer months, TAP purchases as a percentage of total attendees increased to 10% to 12%. In effect, TAP is overpriced in the early spring and fall while it is underpriced throughout the summer months.

The differences in the percentage of visitors purchasing TAP in early spring versus the summer months may be attributed to the fact that lower temperatures often limit rides and animal feedings in March and April. This alters how consumers may value the TAP product, which is represented in their willingness to pay.

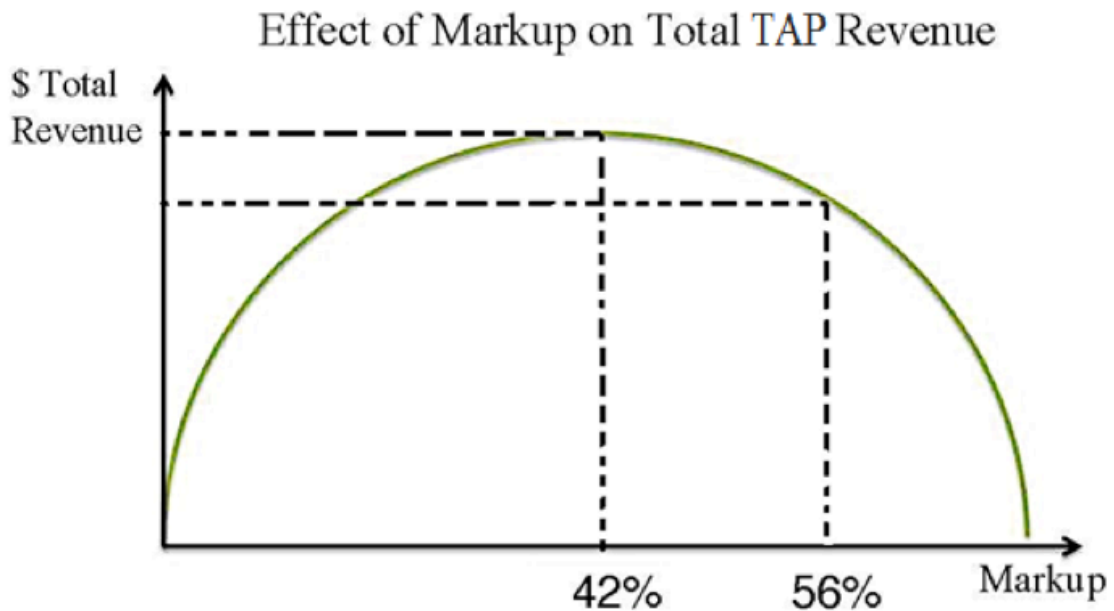
We created a statistical model analyzing 2014 data for consumer purchasing patterns, seen in Appendix 3.1, which supports the claim that customers' willingness to pay was significantly influenced by the markup percentage rather than solely on the \$10 fixed premium. Our model controls for the day of week, time of year, amount of rain, weather events, temperature, and total attendance to isolate the effect of the markup on the amount of TAP tickets purchased.

### TAP Pricing Recommendation

Based on the statistical model outlined above, the additional price consumers pay for TAP over SAP should be lowered on average during the high markup periods (March, May) and increased throughout lower markup periods (July, August) in order to maximize total TAP revenue. We suggest the price of TAP should be a fixed percentage of the SAP price rather than the current method of placing a fixed dollar amount above SAP. A fixed TAP markup percentage above SAP admission incorporates the dynamic pricing model's realized fluctuations in demand throughout the year and week, which allows the Zoo to consistently capture consumers' premium willingness to pay.

Our team created a second regression model to determine the optimal fixed markup percentage above the admission price to maximize revenue (Appendix 3.2). Controlling for the previously mentioned variables, we analyzed the effect of the markup price throughout the year on daily TAP revenue. Our results suggest a 42% markup above the admission price throughout the year will return the greatest revenue. In comparison, the average markup percentage throughout the 2014 season was 56%. This markup percentage is consistent with our initial regression findings that suggested lowering the price of TAP on average will increase revenue.

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Simulating this markup price to the daily conditions of 2014 resulted in a revenue increase of \$221,508.8, or 33% more TAP revenue over the same period.

While the optimal markup percentage we provided is reflective of 2014 data that will vary as TAP and the Indianapolis Zoo change over time, the fundamental logic of our recommendation remains. Incorporating TAP into the standard admission dynamic pricing model is the most effective method for revenue maximization. We recommend that the Indianapolis Zoo leverage our analysis to calculate new optimal markup percentages on an annual basis.

As the TAP program has only existed for one year, there are limited data available for a comprehensive marketing analysis. Collecting additional data in a low-cost manner can help increase the impact of the popular TAP program by supporting the design or choice of additional marketing tools for TAP that can make the program more valuable to the Zoo and to the Zoo consumer. Currently, the Zoo collects little data for product promotion for the TAP program. In addition, the Zoo does not allocate any funding dollars towards TAP specific advertisements or promotions. TAP is currently distributed through two main distribution channels: the internet and in-person at the time of ticket purchase at the zoo. In order to grow the popularity and revenue-generating benefits of the TAP program, and consistent with the literature, we suggest an increase in spending to market the program based on data that reflect where people are most likely to encounter information about TAP.

The costs associated with these efforts should be offset by the improvements in the TAP program in the form of stronger prediction of trends, better understanding of the target audience, and providing services consistent with other Zoos (GCSE Bitesize, 2014). Companies using marketing data effectively, especially in the social sector, have found they were more able to measure success in terms of the response of customers, create a more integrated purchasing experience, and tailor messaging of promotions in an efficient and effective manner (Miller, 2013).

### Marketing Recommendations for TAP Promotion and Evaluation

1. Create a Brand Identity System for TAP: For PR and marketing purposes, it is important to maintain consistency in words used in all promotional materials, business plans, and data collections. Currently, some materials use "TAP" and others use "total experience package" and even "unlimited rides program." It is not easy for visitors and stakeholders to identify what the TAP program consists of, especially as a relatively new program. The Zoo should create a brand identity for TAP and reinforce it throughout TAP promotional efforts described below. Further information explaining TAP also could be offered on the Zoo's website. For example, questions like "What is included in TAP? How could customers benefit from purchasing TAP? What is the difference between regular admission and TAP tickets?" should be included in FAQs.

2. Benchmarking for New Ideas: Many other zoos or recreational facilities offer programs similar to TAP. As such, the Zoo can take a variety of ideas from other locations. Additional benchmarking can help to get a better idea of current-state for TAP marketing efforts, help provide a strong foundation for proposed changes, work toward continuous improvement of TAP marketing, and help to standardize the language of the promotion to match industry standards (Wise, 2011). Please see Appendix 3.3 for a selected list of best practices and promotional efforts taken from other venues. Appendix 3.4 provides additional benchmarking of programs similar to TAP.

## Marketing Analysis

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3. TAP Product: The Zoo's strategic plan outlines a number of proposed TAP changes in the future. Changes to rides, the Zooper Challenge, what types of live animal interactions will be offered and other ideas are being considered. Through a series of benchmarking with other premium ticket offerings (outlined in Appendix 3.3), a number of changes were taken as potential best practices for consideration to the TAP program. The benchmarking reviews eleven premium ticket options at similar zoos and attractions throughout the country (only premium ticket offerings that were not attached to Zoo membership were considered). Below outlines five potential adaptations to the TAP program based on benchmarking from other area's offerings.

a. **Best Practice:** Additional fees for live animal events. The Houston Zoo charges participants an additional \$5 to participate in giraffe feedings. While this fee is an add-on to their premium ticket pass, users still line up to participate in the event.

- **Feasibility:** Based on the user survey, the live animal feedings are by far the most popular element of the TAP program. Users may be willing to pay for an additional live experience with an animal. This "add on" approach could be used to pilot new additional animal additions to the TAP. In addition, live animal feedings present a number of sustainability challenges (over-feedings, animals not being in the mood to etc, weather restrictions etc). The additional fee for participation in a feeding or experience can help to control the number of customers utilizing these experiences. It is not recommended to adopt this approach to the current structure (as the live animal exhibits are so popular with customers). However, it could be applied to potential new additions to the program or be connected to additional special experiences the Zoo sells.

b. **Best Practice:** Discounts on additional purchases in the Zoo. The Phoenix Zoo's premium ticket option offers customers an additional 40% off additional experiences purchased during their visit to the Zoo.

- **Feasibility:** Due to TAP's structure, this model would not be sustainable or recommended. If the Zoo did want to incorporate more additional discounts, they could model adding in a discount to the gift shop, a discount on a 4-pack of TAP tickets, or a percentage discount on a TAP purchase during the customer's next visit to the Zoo.

c. **Best Practice:** Add food discounts to the Premium Ticketing Option: The Atlanta Zoo gives purchasers of their premium passes a certificate redeemable for one lunch basket and one fountain drink. Other options benchmarked were a free beverage with purchase, discounts on meals with a purchase (ie 10% off a meal), a free kids meal with the purchase of an adult meal, or coupons for special treats (like ice cream cones). Combining food with a ticketing experience drives traffic and spending to Zoo vending and helps patrons stay in the Zoo for longer periods of time.

- **Feasibility:** Based on feedback from Zoo personnel, the current vendor set-up does not allow the Indianapolis Zoo to offer food discounts in conjunction with purchase of the TAP. However, many other Zoos and special attractions offer this benefit to customers. If the food and beverage vendor changes in the future, the Zoo should consider conducting a feasibility analysis of adding discounted or free food to TAP purchasers.

d. **Best Practice:** Reserved Seating for Customers: The Grand Prix of Indianapolis offers purchasers of their Bronze Badge access to a variety of special experiences. They also give Badge purchasers reserved seating for two days during the event.

- **Feasibility:** While the Zoo certainly isn't racing anything, the idea of preferred seating may appeal to the Zoo's key demographic of families. Especially during peak time of visit (when the Zoo is busting at the seams with visitors), having a reserved place to eat lunch, cool off, or relax could appeal to customers. The Zoo could pilot adding reserved TAP seating in food areas (thus potentially driving food purchases), reserved shade stations, or reserved parking for TAP participants (especially when parking is in high demand for visitors).

e. **Best Practice:** Animal specific presentations geared towards premium ticket purchasers. At the Oregon Zoo, special keys allow users to unlock the "secrets of the zoo and learn about favorite animals at talk boxes on zoo grounds." Keys give special information about bats, black bears, bald eagles, elephants, giraffes, otters, and 15 other animals.

- **Feasibility:** Implementing a Zoo Key system is not recommended for the Indianapolis Zoo. The Zooper Challenge adapts this structure throughout the Zoo. However, there is a lot of potential with adapting a human element of the program. The Zoo's well-trained and passionate staff and volunteers guide Zoo visitors through an engaging and informative experience. These human experiences help guide members and visitors to have deeper and more meaningful connections to the Zoo's animals and the Zoo's conservation mission. We propose re-adding a human element into the Zooper Challenge. Because the most popular experiences taken advantage of in the TAP include animals or the attraction rides, adding a more personalized interaction to the experience would probably resonate with customers. Because the Zoo dedicated significant resources to developing and training its volunteers and professional staff, utilizing these dynamic individuals can drive people to the TAP program. Ways to implement humans could be: having a "Zooper Expert" at each kiosk to explain the challenge and meet with customers. The zoo could a "Zooper Challenge" swearing in ceremony (zoo keepers meet with kids who have completed the challenge and make them honorary zookeepers. This model is popular at State Parks for the Honorary Ranger program). The Zoo could let participants take pictures with zookeepers and an animal during special times of the day.. Selecting a model would depend on market demand and volunteer availability. Market testing specific ideas is recommended to find the best fit for participants.

## Marketing Analysis

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All changes to the TAP program should consider the preferences of TAP purchasers. The Zoo can develop changes based on feasibility, an analysis of the financial return on investment, and the sustainability of the change.

4. **TAP Online Promotion and Tracking:** A number of different platforms could be utilized to better promote the TAP program to potential users. To find out which methods would be most effective with targeted users, the Indianapolis Zoo can start to track impressions that individuals have of TAP. Online promotion of TAP can be evaluated through a number of free resources.
  - a. **Social Media:** Social media platforms such as Facebook, Twitter, and Instagram all provide free analytics for accounts.
  - b. **Google Analytics:** Paid promotions receive substantial feedback on their impact. Google Analytics can help to explain the campaign source (where traffic to the TAP website comes from), campaign medium (organic, pay per click, email, referral, a friend, etc.), and the campaign name (the name of specific promotional efforts that can be compared to other campaigns) (Oprea, 2015). This powerful data resource can tailor results to see what areas impact target TAP audiences the most effectively.
  - c. **Online Outreach:** If the Indianapolis Zoo sends out tailored email promotions, they can track the click through rate of the TAP URL, if the email was opened, and the overall response rate to that form of communication. Current data collection methods did not indicate tracking of TAP specific communications.
5. **Live Promotions:** The Indianapolis Zoo can also use non-digital marketing to raise awareness of the TAP program with Zoo Members and members of the public.
  - a. **Sampling of Locations:** Tracking foot traffic through the Zoo can be done with simple sampling to calculate the average number of Zoo patrons at certain parts of the Zoo or the parking lot. When the optimal location is determined (through an average of individuals seeing the space), TAP promotions can be placed. For example, TAP logos could be placed on other general promotional materials (billboards, recycling cans, employee uniforms, informational kiosks etc).
  - b. **Existing Promotions:** Billboards, advertising on trash/recycling cans, apparel, mailings to individuals, television advertisements, magazine placements, and Membership materials can all be adapted to place the TAP logo, information about TAP, or links to places where TAP can be purchased.

6. TAP Distribution: TAP is the same regardless of whether it was purchased online or through another distribution channel. Currently the Zoo does not track the quantity of TAP tickets purchased in person (including through new distribution channels suggested below) vs. TAP tickets purchased online, but doing so in future can help shape how marketing dollars are distributed by informing the marketing team where consumers interact most with the program. We note that the Zoo wants to drive more visitors to purchase their tickets online, and marketing toward this effort may incorporate additional TAP marketing.

- a. **TAP Distribution Partners:** To the extent it has not already done so, the Zoo might approach other complementary organizations in the city of Indianapolis to sell TAP and Zoo tickets, and the Zoo can track which are most effective partners. For example, the Zoo may be able to explore partnerships with other organizations mentioned elsewhere in this analysis (such as other local attractions like the Indianapolis Children's Museum or local tourist agencies like Visit Indy). Also, many travel review sites and blogs often post reviews of the Indianapolis Zoo and the TAP program. If an official Indianapolis Zoo employee can provide the blog or review site with a link to tickets, the Zoo can then begin to track which sites drove individuals to purchase tickets using a tracking service, such as Bitly.

7. TAP Ticket Kiosk Evaluation: The Zooper Challenge is a TAP-exclusive add-on that allows children to interact with kiosks around the Zoo by answering questions in order to earn prizes. Participants can earn a reward even if they do not complete the entire challenge, and rewards are retrieved at the Zoo Gift Shop. A new proposal from the Zoo's Guest Experience team would allocate a Zooper Challenge Kiosk in a visible area towards the main entrance of the Zoo. The purpose of the Kiosk would be to introduce the Zooper Challenge early in the visit to the Zoo, thereby increasing the number of TAP visitors who participate in the Zooper Challenge and in TAP. The Hix Institute's evaluation revealed that 40% of TAP participants had no overall awareness of what the Zooper Challenge is, and that 27% of TAP users who failed to do the Zooper Challenge had intentions to participate in the Zooper Challenge but did not do so because their children were too young, they did not understand how it worked, or they did not want to start it in the middle of the Zoo campus. This limits the effectiveness of the Zooper Challenge as a means of delivering the Zoo's conservation messaging and education, and may limit purchase of TAP because visitors are not aware of this added benefit of TAP. For participants who buy TAP for reasons other than the Zooper Challenge, the Kiosk can serve as a reinforcement mechanism to help convince them to participate in the Zooper Challenge, which helps in mission delivery. Continuing to collect data on Zooper Challenge participation before and after the introduction of the kiosk will allow the Zoo to evaluate the impact of the new kiosk in this regard.

- a. Notably, the kiosk will hold the wristbands and prizes for Zooper Challenge participants; previously, an average of 17% of participants who started the Zooper Challenge went on to collect their award, which was given in the gift shop. By distributing prizes via the kiosk, it is possible the Zoo will drive less traffic to the gift shop.

## Sustainability Analysis

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TAP's primary mission is to enhance the Zoo's fiscal sustainability by increasing the Zoo's in-park revenue and enhancing the visitor experience by disbursing the crowds throughout the zoo. The external economic climate of the United States, Midwest region, and the City of Indianapolis has a significant impact on premium programs like TAP. In a prosperous economy, we expect people to be more likely to spend additional disposable income on purchasing premium experiences and we expect that TAP would be one such experience. The demographic analysis (Table 1.1, p.10) indicates a positive correlation between income level and ticket price. One point increase in income leads to a 0.079 points increase in people's willingness to pay for the zoo. The willingness to pay for TAP is likely lower, since TAP is an add-on to zoo admission and this is already a part of Zoo willingness to pay.

To determine the Zoo's external economic climate, location quotient is used as an indicator of Indiana's economic climate for zoo related industries. Ideally, we should use the 5-digit level North American Industry Classification System (NAICS) data with code 71213 (Zoos and botanical gardens). However, since most county and metropolitan statistical area (MSA) data are unable to be disclosed at the 5-digit level, state employment data under NAICS code 7121 (Museums, historical sites, zoos, and parks) are the best available alternative.

The location quotient (LQ) is defined as the percentage of local employment or income accounted for by a given industry, divided by the percentage of a standard area's employment or income in that industry. It allows an area's distribution of employment by industry to be easily compared across areas. Chart 3.4 shows the location quotient of NAICS 7121 for Indianapolis MSA and Marion County. We use the state of Indiana and the U.S. as reference areas, respectively. When the U.S. is the base area, the LQ for Indianapolis MSA equals to 1.22. This indicates that museums, historical sites, zoos, and the parks industry make up a larger share of the Indianapolis MSA employment total (near 1.22 times) than for the country as a whole.

The higher concentration of employment indicates a comparative advantage in museums, historical sites, zoos, and parks industry in the Indianapolis area. This is especially true in comparison to the Indiana state-wide value of 0.66. This suggests that the zoo could perform favorably as an attraction outside of the Indianapolis metropolitan area, as there are few attractions outside of this area.



The higher concentration can also be indicative of an extremely competitive environment for the zoo. This can also be an advantage to the zoo, as industry cluster theory suggests that concentrating industries in specific regions actually creates advantages for the individual industry members – specifically, industry agglomeration increases the productivity of organizations in the cluster, stimulates the innovation in the field, and generates new businesses served around the industry. Overall, these factors indicate that the zoo operates in a supportive local economic climate.

Chart 3.4: Location Quotient by Using QCEW 2013 Employment Data (NAICS 7121)

Area	NAICS 7121 Employment	Total, all industries Employment	LQ (Base Area: IN)	LQ (Base Area: US)
<i>Indianapolis-Carmel-Anderson MSA</i>	1226	801358	1.84	1.22
<i>Marion County</i>	991	496766	2.40	1.60
<i>Indiana Statewide</i>	2,044	2,458,260		0.66
<i>U.S. Total</i>	141,242	112,958,334		

Data source: BLS website, retrieved from: [http://data.bls.gov/location\\_quotient/ControllerServlet](http://data.bls.gov/location_quotient/ControllerServlet)

We performed an organizational setting analysis to assess the level of internal and external resource support for TAP. Organizational setting analysis is broken down into two broad categories: organizational capacity and key partnerships. Organizational capacity measures whether the Zoo has devoted all resources needed to support effective operation of TAP. The partnership analysis reflects the level of connections between TAP and the Indiana community.

Chart 3.5

Internal Support	External Support
<i>Human Resource Department</i>	Creative Services
<i>Public Relation Department</i>	Simex iWerks
<i>Guest Service Department</i>	Greattimes Family
<i>IT &amp; Finance Department</i>	National Organizations*
<i>Attractions Department</i>	
<i>Polly Horton Hix Institute</i>	

\* The Zoo has received major grants from these national organizations. They include, but are not limited to: National Science Foundation, Institute of Museum and Library Services, U.S. Fish and Wildlife Service, U.S. Dept. of Agriculture, Lily Endowment, Eli Lilly Company Foundation, Dean and Barbara White Family Foundation, and the Nina Mason Pulliam Charitable Trust.

## Sustainability Analysis

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We first address the question of whether TAP has been integrated well into the Zoo's operational capacity. The Indianapolis Zoo listed interdepartmental support as the a goal in its annual business plan. Departments with involvement in TAP include Human Resources, Public Relations, Guest Services, IT & Finance, and Attractions. Human Resources provides assistance to recruit and train seasonal staff for various TAP positions (BP 2014 – 15). Public Relations updates Zoo manuals to include TAP program information into the marketing materials and develop new signage and banners to promote TAP. Guest Services assists with TAP implementation through monthly TAP review meetings while IT is responsible for evaluating and developing new Zooper Challenge games. Additionally, the Polly Hix Institute, the research center established at the Indianapolis Zoo for animal conservation and research, helps to conduct evaluations for TAP, like the Zooper Challenge evaluation.

TAP's most important external partners are Creative Services and Simex iWerks. In collaboration with the PR department, Creative Services develops signage to promote featured 4-D movies and TAP. Simex iWerks assists in developing the movie schedule for the 4-D theatre and provides TAP sales training for cashiers.

In order to perform a more detailed cost-benefit analysis for growing TAP, the Zoo could:

- Add one question to its 2014 Summer Survey to capture the income level of visitors who have purchased TAP
- Add one question to its 2014 Summer Survey regarding people's willingness to pay for TAP (i.e. If TAP's price goes up/down by x percent, would you purchase it?)
- Calculate total person hours and other resources specifically dedicated to TAP, to get a stronger sense of program costs

### Sustainability Recommendation

Develop a Strategic/Sustainability Plan for TAP: Currently both external organizations (e.g. Creative Services, Simex iWerks), and many Zoo departments, are involved in TAP development and implementation, but without a clear and carefully developed strategic plan for the program. Having such a plan can help to reduce delays in the basic program managerial cycle and speed up the identification of needs, fundraising, development of capacities, and performance management (Chalupova et. al., 2014). Such a plan could incorporate the recommendations we offer for TAP in this report as well give detailed goals with timelines for accomplishing each. The plan should also include metrics for measuring success of each goal.



# Special Programming

## Overview

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To begin creating new program ideas for the Indianapolis Zoo, we were guided by the Zoo's primary goals of targeting a new customer base; encouraging the existing customer base to spend more money; and flattening revenues through the calendar year. For each of these goals, we used the results of our internal SWOT and research of external zoos and amusement parks to identify potential programming and events. These potential programming possibilities and events are seen in our preliminary recommendations in Appendix 4.2. Appendix 4.3 provides a survey instrument with which the Zoo may pre-test visitor and patron interest in the recommendations described below.

### Recommendations

*Bring in the Spring:* Bring in the Spring encompasses two events that occur in late March, coinciding with the opening of the Butterfly Kaleidoscope: a traveling dinner tour at venues through the zoo and an exclusive luncheon. The traveling dinner tour gives couples a unique date experience, and the exclusive luncheon brings gardeners and landscapers together to learn about nature, horticulture, birds, and butterflies.

*Chinese Lantern Festival:* The Chinese Lantern Festival takes place after Chinese New Year, usually in February or March depending on the lunar calendar. The Lantern Festival is used to celebrate the coming of spring in mainland China, Hong Kong, Taiwan, and South Korea. The holiday is celebrated by hanging lanterns and creating life-sized illuminated lantern sculptures. This festival attracts many people who come to see the lit-up artwork, especially in the darkness of winter.

*Senior Days:* Senior Days is a monthly promotion that offers a special invitation and discount to those in the community who are senior citizens (65 and older) or those who are grandparents. We envision special indoor, easily-accessible activities designed for the guests on these days.

*Tell the Animals' Stories:* Closer connections between the animals and visitors help to raise visitor engagement with and investment in Zoo operations. We recommend a number of new initiatives to foster these connections between patron and animal. Creating more personalization between the animals and visitors will help to raise revenue and attendance and should be very easy to implement.

*Tour of Veterinary Hospital:* Dr. Michele Bowman gave five of us a behind-the-scenes tour of the Polly Horton Hix Animal Care Complex on March 29, 2015. We thoroughly enjoyed the experience and have made establishing this as a behind-the-scenes tour one of our top recommendations.

*ZooPerts:* ZooPerts is a monthly lecture series that would feature local, Indiana-based breweries and wineries; ideally a different brewery or winery would be represented each month. Lectures would entail a scientist, veterinarian, or Zoo trainer discussing problems facing an animal at the Zoo, species in the wild, or Zoo operations in general. Further, ZooPerts could be an opportunity for the Zoo to share success stories, as good news should always be celebrated. In all cases, we advise that the Zoo expert leading the lecture include one or more specific actions that the attendees could take to help the Zoo's efforts.

Our team identified and vetted Indianapolis Zoo programs and programs that other zoos offer. We first concentrated on generating an internally-focused SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of the Indianapolis Zoo's current programs, premium services, and events. We then looked externally at other zoos, museums, and theme parks, and compiled a list of premium services, events, and other programming that the Indianapolis Zoo currently does not offer.

We used two phases to develop our "What Works Criteria", a set of characteristics of successful events, programs, services, and activities at the Zoo or elsewhere. In the first phase, we developed an initial "What Works Criteria" based on a SWOT of existing Zoo offerings. While there was not the same data provided for all activities that would have allowed for an easy comparison, we did include the cost and attendance numbers provided to us in our SWOT. The second phase revised the initial "What Works Criteria" based on conversations with Zoo staff, our personal experiences at the Zoo, and the external research compiled from other nearby zoos, seen in Appendix 4.1.

We internally ranked each of the proposed preliminary recommendations, which are outlined and discussed in Appendix 4.2, on different categories. These categories included how well the proposed programming fits the "What Works Criteria," the profitability of each of the recommendations, the ease of program implementation, the ease of managing the program long-term, the extent of external support and program details that we have for these events. Each category received a numerical ranking on a scale of 1 to 5, with 1 being the lowest and 5 the highest. Each group member scored each preliminary recommendation on each of the categories. The sums of the averages for each recommendation were calculated, and our group selected the top six recommendations. In the next section we provide an overview, reasoning for selection, and details of each of these top six recommendations. The subjective scores for each preliminary recommendation are not included in this report but can be provided upon request.

Since special event and program recommendations target specific ages and customer groups, survey data are crucial to provide evidence for or against these recommendations. To gather this data, we have created a survey as a guide for the Zoo should they wish to implement any of the recommended events. The survey may be found in Appendix 4.3.

# Analysis

## Bring in the Spring



### Reasoning

*Bring in the Spring* combines findings from our research, as well as elements from our other recommendations, such as the following: programs, promotions, or events that target seniors; lecture series or classes for adults; more behind-the-scenes tours and unique experiences; and exclusive events that include food and live music. *Bring in the Spring* also aligns with our goals of recommending ideas that generate revenue during the Zoo's off-peak period, and it has the potential to attract a broader customer base. In addition to the findings from our research, Dennis Woerner's interest in a late-March event guided our development of *Bring in the Spring*, along with the Cincinnati Zoo's existing Tunes and Blooms event and annual Tulip Luncheon. The Tunes and Blooms event offers live music every Thursday evening in April. At \$75 per ticket, the luncheon includes a tour, sustainability presentation, and a plant sale. This event has demonstrated success for the Cincinnati Zoo. Smaller elements of *Bring in the Spring* were influenced by the Detroit Zoo's incorporation of a "strolling supper" in their events, and many zoo events in our research included educational chats, animal encounters, and other activities like trivia games.

Because young couples are often seen at the Zoo, we wanted to create an event that was a perfect dating experience. This dinner tour could in fact be marketed to couples of all ages. The structure allows time for couples to stroll through exhibits alone or participate with larger groups.

*Bring in the Spring* creates learning and socializing opportunities for adults and seniors, creates a fun and structured date night experience, and provides opportunities to engage guests in further involvement as donors, members, or returning visitors. These events are built around the non-competitive uniqueness of educational Zoo premium services and the popularity of food, flowers, and live music found in events at other zoos and at the Indianapolis Zoo.

### Full Description

The dinner tour structure involves visitors traveling around the Zoo's indoor spaces. It includes live music, animal encounters, trivia, and educational chats and stories about animals and other scientific concepts. Each course is located in a different space. The experience might work as follows:

*Guests arrive in the gardens between 5:30-6 p.m. for cocktails. A host welcomes them, introduces speakers and tour guides, and reviews the night's itinerary. Guests are then given a brief introduction to the butterfly exhibit. Live music and appetizers entertain guests in the grand hallway of the Hulman Riverhouse, while others enjoy the butterfly exhibit. At 7 p.m. guests move to either the Oceans or the Orangutan exhibit, where a main course is served. As they are eating, guests will enjoy a 15 to 20 minute chat, and then they will have the opportunity to wander the exhibit. Keepers will hold smaller animals, giving guests an opportunity to see them up close. Guests are then able to walk through other exhibits and grab dessert in the Desert exhibition area, at their leisure. The night ends back in the Riverhouse, where guests enjoy drinks, live music, and a trivia competition.*

By traveling to different indoor exhibits throughout the Zoo, we mimic the traditional visitor experience, but each space is decorated for the occasion. Visitors have an element of choice and control to their experience, which is appealing to some, but it also helps spread guests out around the indoor spaces of the Zoo. The Dolphin Gallery could provide a more formal, romantic, sit-down dining experience versus the Orangutan exhibit, which could offer finger foods and allow guests to socialize. There could be a different selection of food at one location versus another, which could also be reflected in the price a guest would pay for a ticket. Opportunities to promote the Zoo's conservation message may also arise during dinner. For example, awareness of sustainable palm oil could be a topic during dinner in the Orangutan area, and fishing practices that do not harm dolphins could be a topic during dinner in the Dolphin Gallery.

The spring luncheon offers guests the first look at the Butterfly Kaleidoscope exhibit. It is the kick-off event to this seasonal attraction. A luncheon would plausibly attract women without children living at home, including seniors. We learned from Anna Musun-Miller that sixty OASIS (an organization serving the retired community) members participated in an OASIS Orangutan program, and she mentioned that the Zoo may provide horticultural programs for this demographic in the future. This provides some support that there would be interest in our proposed spring luncheon. After lunch and a lecture, the event culminates with experiencing the butterfly exhibit.

Cold weather and any precipitation would put a damper on the festivities. However, the luncheon is in one location, within the Hulman Riverhouse or outdoors, if weather permits, and dinner-tour participants would only be outdoors for a short portion of the event, as they travel from one place to the next.

The suggested price for a ticket to the dinner is \$150-\$200 per person, and \$75 is the recommended price for the luncheon. Prices would depend on many different factors, including the quality of the food, popularity of hired bands or ensembles, the number of staff required to execute the event, and other cost considerations. As previously mentioned, the Cincinnati Zoo's luncheon prices their event at \$75, and this price therefore seems reasonable for our proposed luncheon. The dinner ticket range reflects an opportunity to have different ticket prices based on dinner choices. The dinner is priced below the \$350 Zoobilation ticket price to preserve the exclusivity of the already-successful event but is higher than the luncheon because it is longer, includes alcoholic beverages, and infuses more activities like animal encounters, chats, and presentations into the experience. Given the fact that Zoobilation sells out at \$350 per ticket, it seems reasonable that people would pay \$150-\$200 for the proposed dinner.

## Chinese Lantern Festival



### Reasoning

The rationale for recommending this project is based on a number of variables. First, the Indianapolis Zoo has already had success in December with Christmas at the Zoo, as people come to see the Christmas lights. Second, like Christmas at the Zoo, the *Chinese Lantern Festival* also takes place in the Zoo's off-season: the event could serve to attract more people in February and March. Third, this event builds on the Zoo's outreach to different communities living in Indianapolis, like the Hispanic Heritage Event, and serves to educate visitors about different cultures. Lastly, the Indianapolis Zoo could make the *Chinese Lantern Festival* into an opportunity to improve its mission. Because China is a source of many conservation challenges, worldwide environmental groups have recently begun to focus more on Chinese conservation policy. For instance, China is at the center of the ivory and rhino horn trade that is devastating elephant and rhinoceros populations in Africa. The *Chinese Lantern Festival* would be a good opportunity to offer Chinese sponsors and environmental groups a platform to strengthen their own engagement, messaging, and awareness of these issues. Another way to improve mission is through the lanterns themselves. Lanterns may be made into the shape of animals, which can serve to highlight specific East Asian animals in the Zoo. Signage near the lanterns could be used to educate people about those animals, in much the same way that a normal exhibit sign might.



### Full Description

The *Chinese Lantern Festival* would create an approximately one-month-long illuminated world within the Zoo to attract visitors interested in the culture, the light show, and mission-related activities. The long nights of winter are an ideal time for this type of event. While the Indianapolis Zoo may have to buy or make some lanterns, the idea is to involve the community as much as possible to reduce costs and increase participation. For example, the Colts may sponsor a lantern in the shape of their logo, with signage advertising their donation. The City of Indianapolis, Cummins, Dow, Eli Lilly, the Indy Chamber, etc. are all examples of organizations that could sponsor a lantern.

The Zoo could also host a lantern building competition between area schools to engage students as well. The themes and criteria for these lanterns could highlight the Zoo's mission (e.g., lanterns to help people learn about endangered animals). The Zoo could also ask zookeepers to participate by building their own lanterns based on their favorite animals in the Zoo. Lastly, children visiting the Zoo may also participate, by making their own traditional hanging lanterns, painting them, and hanging them up in the zoo. The overall idea is to make the lantern festival unique to Indianapolis. By allowing local organizations, residents, and schools to participate and design their own lantern sculptures, it would allow the city to take ownership over the festival and transform it into a unique blend of Hoosier and Chinese cultures.

Apart from the lanterns themselves, the *Chinese Lantern Festival* creates other opportunities for further related events. For instance, there could be Grand Opening and Closing events with cultural performances, food, drink, and other activities. If the Lantern Festival happens during Valentine's Day, there could be a Valentine's Day event with a "Romantic Stroll" through the lanterns. The Zoo may consider a partnership with the Confucius Institute at IUPUI and the Indianapolis Chinese Community Center, Inc. (ICCCI). The Confucius Institute could provide Chinese decorations and the ICCCI could provide cultural performances.

## Senior Days

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### Reasoning

*Senior Days* attracts older people to the Zoo and encourages them to bring their grandchildren or to spend the day at the Zoo with their partner. In our research, we did not find specific Zoo events, programs, or activities targeted toward seniors, and so these themed promotional days fill the gap and reach out to a new population. *Senior Days* also may bring in the seniors' grandchildren, who are more likely to return with other family members. Additional services like golf cart tours, behind-the-scenes tours, and indoor craft activities could offer other sources of revenue. We are aware that seniors are prone to marginalization due to their age and perceived inability to contribute. We believe that incorporating seniors days can help to lessen the effects of marginalization that this population faces by providing them with a monthly opportunity to come to the Zoo, spend time with their partners, grandchildren, and friends while recalling old memories and establishing new ones simultaneously.

We imagine that *Senior Days* would be quite simple to implement and would only require minimal adjustments to accommodate this demographic group while they are at the Zoo. For those who come to the Zoo on this day, enhanced transportation around the Zoo might be necessary; accessibility and extreme temperatures are logistical challenges for many seniors. We anticipate that implementation of this event would require some season-specific considerations, such as having winter activities indoors. We also believe that this event would be easy to maintain over a long period of time, especially if the activities are planned months in advance.

Other zoos, including those in Atlanta, Pittsburgh, San Francisco, and Toledo, all have Grandparents' Days, where up to two grandparents are given free admission with the purchase of one full price children's ticket. Our proposal opens the window not only to grandparents, but to seniors as well. Fostering a relationship between the Zoo and seniors also presents the Zoo with an opportunity to be considered by seniors who have established bequests or planned giving endeavors.

### Full Description

Senior citizens who come to the Zoo on this day may be given half price admission to the Zoo, while grandparents who come to the zoo with their grandchildren may be given free admission with the purchase of one full price kid's ticket.

The Zoo could play timeless love songs from the 50s, 60s, 70s, and 80s to bring back memories of youth to the seniors who come to the Zoo with their partner. Informal short classical chamber concerts in the Dolphin Gallery may be an interesting possibility to add to Grandparents/Seniors days, as well. This would be a unique experience for the guests, as they would be able to listen to the music, watch the dolphins swim around them, and enjoy themselves and their loved ones simultaneously. We also believe that this population could greatly benefit from a senior-orientated health fair coupled with the animals that highlights various aspects of the aging process, such as agility, balance and appetite, in both humans and the animals in addition to providing seniors with recommendations about ways to maintain and/or improve their health.

## Tell the Animals' Stories



### Reasoning

Throughout the research process, we have learned much about the animals at the Indianapolis Zoo as well as animals in zoos around the country. The individual stories we have heard while visiting and conducting research helped to familiarize and personalize the animals to us, thereby strengthening both our ability to connect with individual animals and the likelihood that we will return to see them again.

### Full Description

A number of small changes, programs, and events may help to tell the animals' stories to the Zoo's visitors. Connecting people with the animals on as many levels as possible is important to creating and maintaining a positive, uplifting connection between Zoo-goers and the animals they are visiting. These interfaces could be small and relatively unobtrusive: creating Ticket Tales, or short stories about individual animals printed on the backs of tickets or on online tickets, would be reasonably inexpensive and introduce a particular animal to guests. Perhaps ten or fifteen different varieties could be created, and patrons who collect and return all of them could be given a prize (this would need to be monitored during field trips and similar large-scale admissions events). A theoretical Ticket Tale might have a picture of an animal individual and say, "Your animal is (X)! (X) came to the Indianapolis Zoo in (Y) year, and is a (X's species). (X) can be found in (Location) in the wild but here at the Zoo (X) lives in (Zoo Location)! (X)'s birthday is (Z) and really wants a new (item that donors could donate towards). Stop by (X)'s house and say hello!" Ticket Tales could then be paired with small in-park celebrations for animals' birthdays, which may be listed on the Zoo's website or in pamphlets handed out with maps at the admissions area.

## Tell the Animals' Stories

Ticket Tales and animal birthday parties could act as vehicles to drive “Animal of the Week” or “Animal of the Month” events. These would be small parties and decorations near the animal’s exhibit during a certain timeframe (one day or one weekend, respectively), with posters or short, colorful infographics describing that animal’s background in much the same way as the Ticket Tales. Children may be supplied with crayons and paper to make birthday cards/awards for that animal, and donations received during that animal’s time may be directed towards specific enrichment activities. We envision that Animal of the Week/Month would have its own section on the Indianapolis Zoo website as well.

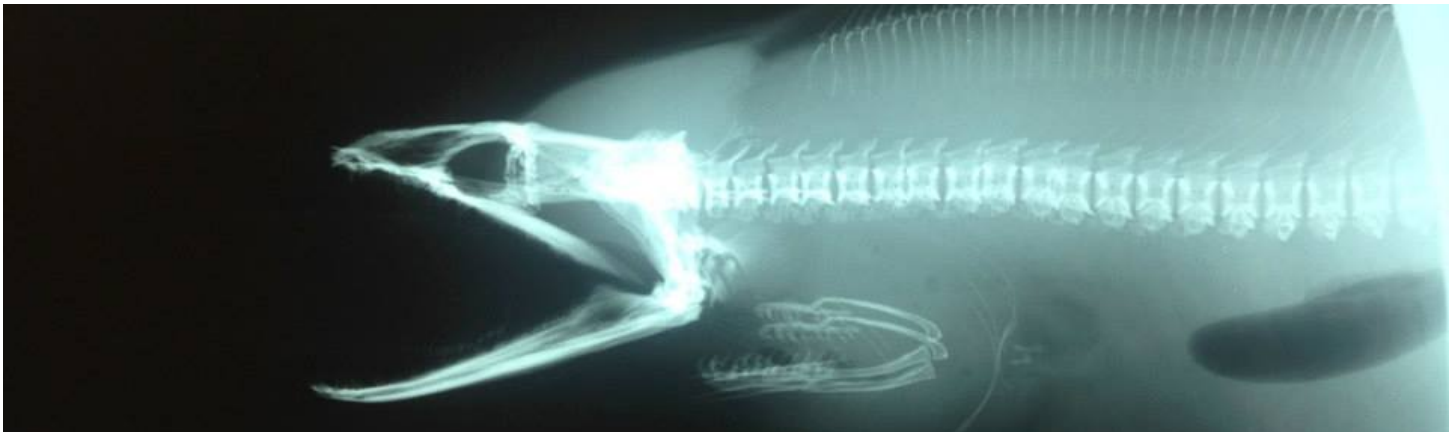
Our conversations with Dennis Woerner suggested that “crafts” events like fairs and markets tend to draw high populations. Localized craft stations that allow people to make a fun personal craft – like birthday cards for the animals – may go over very well with families. In the same vein as birthday cards, small stations could be set beside empty exhibits where the animal has been taken to the veterinary hospital, so that visitors can make “get well” cards for those animals.

“Zooerlatives” may also help to better connect people to the animals and their stories. At some point during a Zoo visit – either in several locations, in connection with the recommended Zooer Challenge main kiosk, or upon exit – a fun and lighthearted poll may be administered to families. The poll would allow patrons to vote on which animals they thought were the cutest, strongest, ugliest, funniest, or anything else. Animals’ exhibits could then be adorned with awards or ribbons every month, extolling their recent wins. “Last month, Pakak was voted silliest!”

A more long-term educational program or set of exhibits detailing the life cycles of certain animals could be a reasonable goal for the Zoo. For certain animals with large and interesting populations (the dolphins, the elephants, the orangutans, etc.) a board or interactive screen describing the Zoo’s individuals, their relationships to one another in a family tree, and the mating-pregnancy-birth-adolescence-adult cycle that their species goes through. These lifecycles boards could feature specific animals from the Zoo’s population, including pictures of them as adolescents, what they looked like at various stages of growth and living at the zoo (potentially including during medical checks, operations, or other wellness-related events with all the birthday and get well cards in the background!), and how they look currently.

## Tour of Veterinary Hospital

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### Reasoning

In talking with Sonya Schkabra, who led our behind-the-scenes dolphin tour, she felt that Zoo patrons highly valued the behind-the-scenes tours that the Zoo recently stopped offering. We researched behind-the-scenes tours at other zoos and found them offered at many zoos around the country, including the Columbus Zoo and Aquarium, Houston Zoo, Maryland Zoo, Milwaukee Zoo, St. Louis Zoo, and several others. Tour specifics varied based on how often the tours are offered, how much is charged, and how long the tours are. A number of tours offered visits to the commissary and/or the veterinary hospital. For example, the Houston Zoo allows patrons to spend a morning with a veterinarian and witness a medical procedure, charging \$200 for Members and \$240 for non-members.

We think offering a behind-the-scenes tour of the veterinary hospital can be unique, raise revenue, and be relatively easy to implement. Though the Zoo recently discontinued this service, reimagining and streamlining the tours might make them feasible and financially salient. Having an on-site and easily-accessible veterinary hospital is something unique to a zoo, and the Zoo should leverage this availability. Although price variation may reflect differences between the Houston Zoo's behind-the-scene experience and our proposal, we can determine from its high price that there is a demand for these types of experiences.

## Tour of Veterinary Hospital

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### Full Description

We envision a 60-minute tour offered once in the morning and once in the afternoon for \$10 per person. This is a reasonable tour price, and is in line with other prices the Zoo charges for similar services. On the tour, patrons may do the following: 1) Look at real animal medical records and decide from a set of options each with pros and cons how they would treat the animal given factors such as age of animal and cost of treatment. Medical records at the Zoo are already made available to the public upon request and patient confidentiality laws that apply to humans do not apply to animals; 2) Hear stories about the difficulties of transporting and treating animals when sick; 3) See x-rays that allow the patron to understand unique characteristics of animals, such as an eel's second jaw; 4) Practice blowing a dulled and corked "medicine dart" out of the veterinary blowgun; and 5) Watch a procedure on a monitor either recorded or live, depending on if one is going on that day. We learned that the infrastructure is already in place to film procedures; it just needs to be hooked up.

The tour will also have conservation messaging. Many of the animals in the zoo are rescues that would not have survived in the wild. Those that came to the zoo with health challenges will be profiled to show visitors how the zoo has provided these animals with care critical to their survival.

We recommend training or hiring someone to conduct this and other behind-the-scenes tours in order to minimize staffing issues and conflicts. The veterinarians do not necessarily need to be available for the tours and in the case of other behind-the-scenes tours, the trainers would not need to be available either.

## ZooPerts



### Reasoning

We believe a *ZooPerts* event would be successful because of our research into other zoos' programming as well as our "What Works Criteria". We found that targeting a specific demographic is particularly successful in programming: *ZooPerts* would focus on adults, both those who have children and those without. Further, by capping the lectures and offering them only once a month, the exclusivity aspect of the "What Works Criteria" is featured. Other elements that we have identified in the "What Works Criteria" that are also present in the *ZooPerts* proposal are events that cater to groups and are unique relative to what is offered in the attraction and in the geographic area. This proposed event would feature Indianapolis-related characteristics, namely the various breweries and wineries found in the state, and the Indianapolis Zoo itself. Initially, we believe it would be best to start with the businesses who are present at Zoobilation each year, as relationships have already been forged with these establishments.

The event would also promote the Zoo's conservation mission in an alternative way. These lectures would take place in an environment that is casual yet intimate, and would showcase some unique qualities of the Indianapolis/Indiana area: not only the local breweries and wineries, but also the specific challenges that Zoo animals face.

Further, the Zoo may want to consider partnering with Indiana museums and additional locations that are off-site in order to reach a larger audience. For instance, the Zoo could partner with an art museum in Indianapolis, focusing on how art depicts a specific animal over the ages. We believe there are a great many venues in the Indianapolis area where a connection could be drawn between the animals and that venue's orientation. While this may generate less revenue for the Zoo if profits are divided between multiple venues, the Zoo's mission could potentially resonate with more people in this manner.



Many other zoos across the country feature adult-focused lectures, such as the Cincinnati Zoo, the National Zoo, and the Los Angeles Zoo. The Brookfield Zoo features classes such as “Sexy Beasts”, Cryptozoology (Bigfoot, the Yeti, a Kraken, etc.), and lectures on topics such as “Architecture and Progress” and “Animals as Ambassadors.” Lectures are \$13 for Zoo members, \$16 for non-members, and classes are \$25.

### Full Description

We believe that a *ZooPerts* event would be a profit-generating endeavor for the Zoo. Admission would be charged for such an event, ranging from \$15-30 per monthly session based on prices charged by similar venues for similar events, and would include admission to the Zoo’s exhibits. Beverages could be purchased for a small fee, ranging from \$3-8, depending on the agreement with the brewery/winery. Lectures can range from 15 to as many as 40 people at a time.

A *ZooPerts* event would be relatively easy to implement, pending the agreement of the breweries and wineries. The event could be held on the Zoo campus: weather permitting, the gardens would be an excellent and scenic location to showcase the Zoo and educate the attendees. During worse weather, the *ZooPerts* event could be held elsewhere on Zoo grounds. Zoo staff could deliver lectures on their areas of expertise, or lectures could be developed based on participant interests. Engaging special speakers like Indianapolis Prize candidates could broaden participation and make the experience even more valuable.

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# Appendices

## Appendix 1

### Data Cleaning

The survey data collected by the consulting firm hired by the Zoo was the best available data for our purposes. We began the process by converting qualitative data into quantitative information we can use. Questions that were in either yes or no format (i.e. which of the following are reasons for your visit to the Zoo today?) were changed into 1's and 0's. (e.g. Be Outside: 1=Yes, 0 = No) The few continuous variables (e.g. Price: \$17, \$21, \$27, etc.) and ordinal variables (e.g. Income: 1 = less than \$40,000, 2 = \$40,000 to \$59,999, 3 = \$60,000 to \$74,999, etc.) remained unaltered. The survey did not include key variables— weather and day of the week – which we computed into the survey data. We chose maximum temperature, because the zoo is open during the hottest parts of the day, whereas the average temperature includes the colder nighttime hours when the zoo is not open. Finally, the Zoo provided us with the daily ticket prices from June 2014 through August 2014. Overall the data included eighty-two variables with fifteen of them measuring demographics, with 701 total observations.

Figure 1.5a



Figure 1.5b

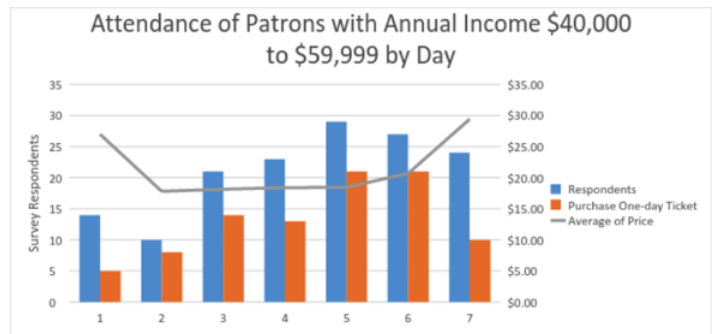


Figure 1.5c

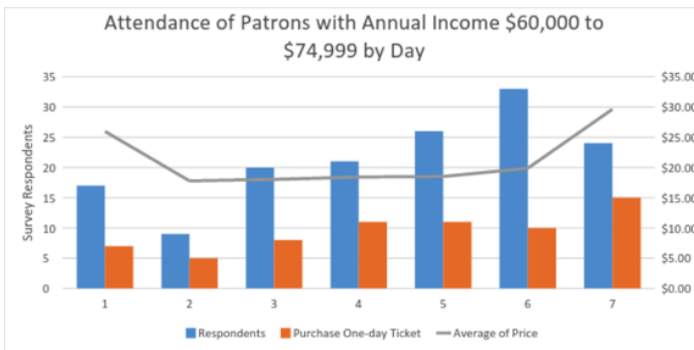


Figure 1.5d

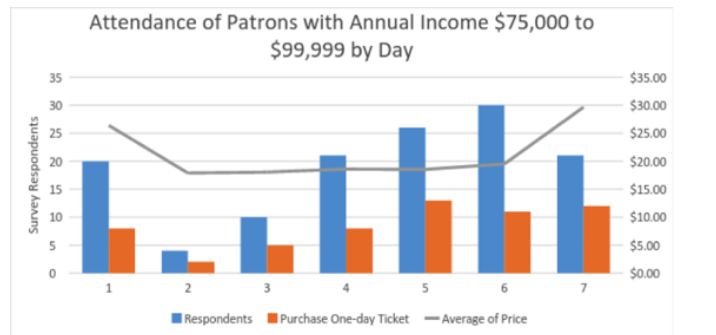
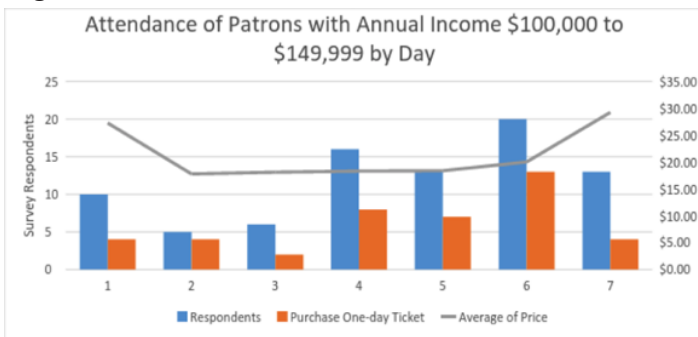


Figure 1.5e



# Appendix 1

Figure 1.6a

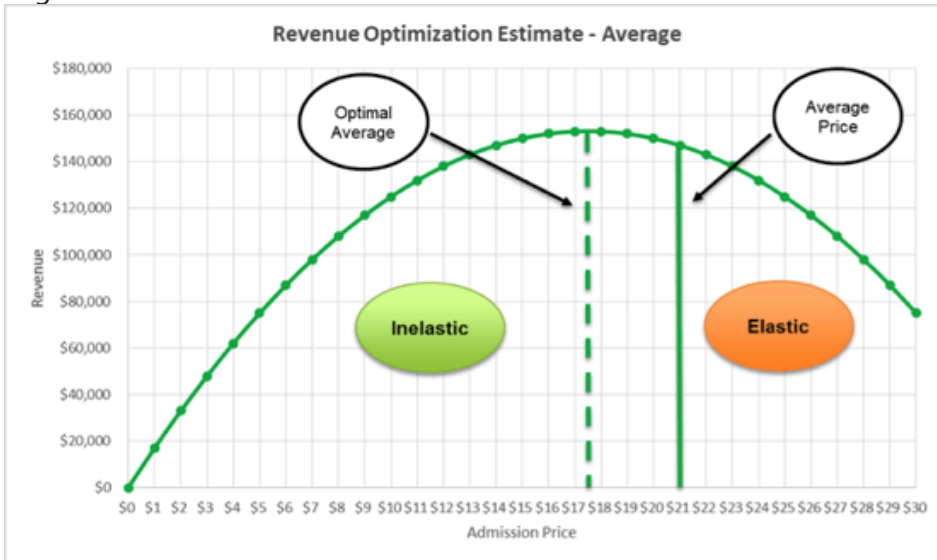


Figure 1.6b

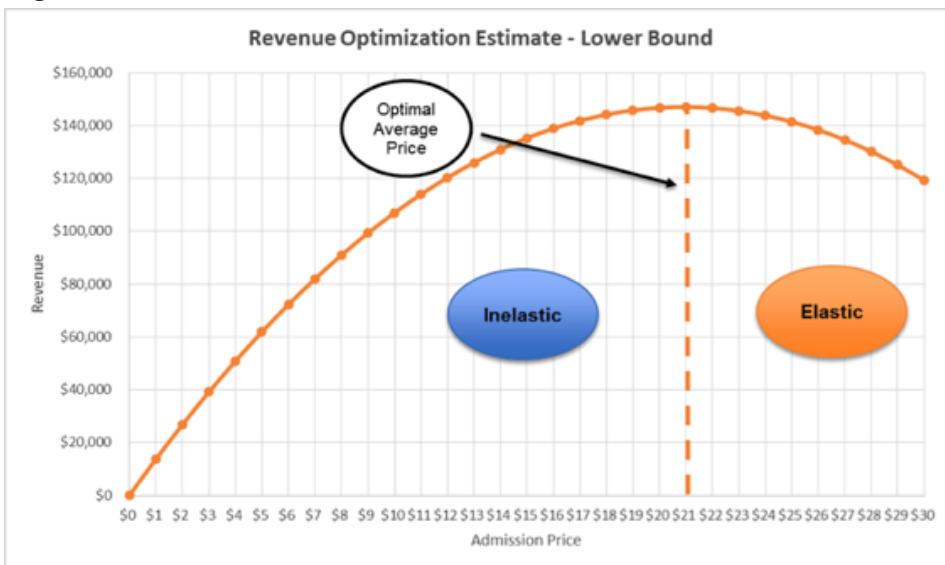


Figure 1.6c

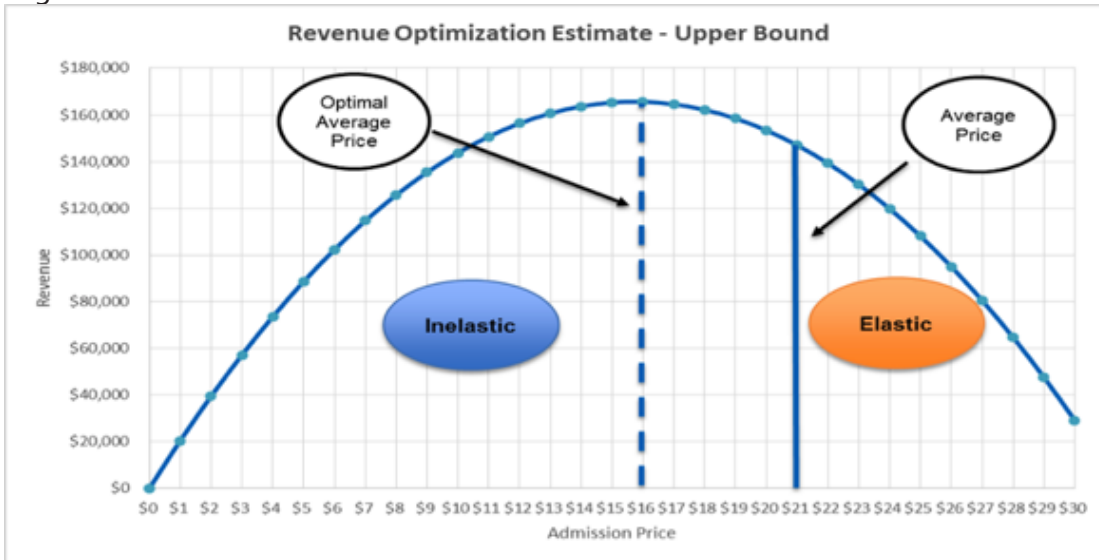
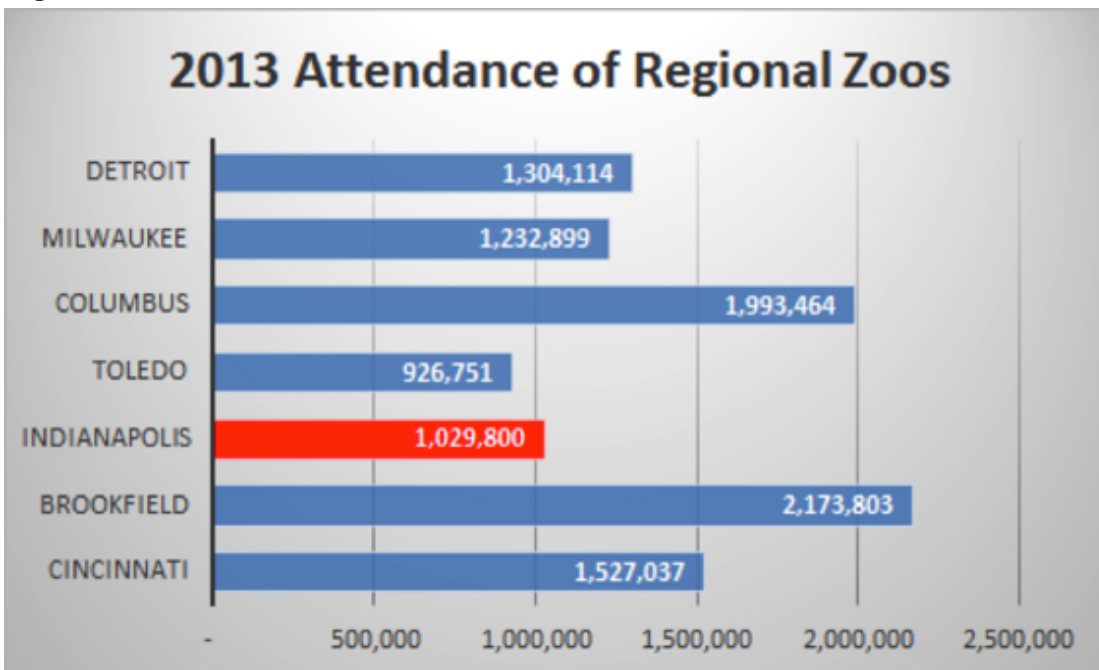


Figure 1.7



## Appendix 1

### Extended Statistical Methodology

For the total attendance model we started by dropping only those variables that were highly insignificant (i.e. p-values of 0.7 or greater) and slowly increased the threshold (i.e. decreasing the p-value criteria). While dropping insignificant variables, we monitored the adjusted R-squared value, which is a measure of how well the individual variables predict total attendance. Even if a variable is deemed statistically insignificant, a large drop – more than two percent – in the adjusted R-squared value indicates that this variable is capturing a significant amount of variation in total attendance and should not be dropped from the model.

Table 1.3

Variable Name	Description	Question
Zipcode	1=Indianapolis 0=Other	Researcher Created
First_Visit	1=First time visiting the zoo 0=Not the first time visiting the zoo	Is this your first visit to the Zoo?
Visits12	1=Number of times the respondent has visited the zoo this year 0=First time visiting the zoo this year	If No, Other than today, how many times have you visited the Zoo in the last 12 months?
Female_Adults	Count of the number of females over the age of 18 in the respondent's family	How many persons, including yourself, are in your immediate party?
Male_Adults	Count of the number of males over the age of 18 in the respondent's family	How many persons, including yourself, are in your immediate party?
Female_Children	Count of the number of female children over the age of 18 in the respondent's family	How many persons, including yourself, are in your immediate party?
Male_Children	Count of the number of male children over the age of 18 in the respondent's family	How many persons, including yourself, are in your immediate party?
Adult_Age1	The respondent's age	What are the approximate ages of the adults (18 or older)?
Child_Age1	One of their children's age	What are the approximate ages of the children (17 or younger)?
Married	Marital status	Marital Status
Income	0 = Decline to respond, 1 = Less than \$40,000, 2 = \$40,000 to \$59,999, 3 = \$60,000 to \$74,999, 4 = \$75,000 to \$99,999, 5 = \$100,000 to \$149,999, 6 = \$150,000 to \$199,999, 7 = \$200,000 or more	In which of the following categories is your annual household income?
Education	0 = Decline to respond, 1 = Some high school or less, 2 = High school degree, 3 = Some college or technical school, 4 = Undergraduate degree, 5 = Graduate degree	In which of the following categories is your highest level of education?
White	1 = Yes, 0 = No	The Zoo is trying to appeal to a broad audience. Please select the category with which you identify yourself (select one or more)
Black	1 = Yes, 0 = No	The Zoo is trying to appeal to a broad audience. Please select the category with which you identify yourself (select one or more)
Hispanic	1 = Yes, 0 = No	The Zoo is trying to appeal to a broad audience. Please select the category with which you identify yourself (select one or more)



Table 1.4

Metrics	Brookfield	Cincinnati	Columbus	Detroit	Indianapolis	Milwaukee	Toledo
% of Revenue from Admissions	35%	25%	15%	20%	32%	28%	48%
Admissions Plus Tax Levy as % of Total Revenue	56%	43%	40%	51%	32%	54%	73%
Expense Coverage by Admissions	40%	28%	18%	26%	34%	28%	50%
Expense Coverage by Admissions Plus Tax Levy	63%	43%	48%	65%	34%	54%	76%

Table 1.5: Metrics used

Metrics	Brookfield	Cincinnati	Columbus	Detroit	Indianapolis	Milwaukee	Toledo
% of Revenue from Admissions	35%	25%	15%	20%	32%	28%	48%
Admissions Plus Tax Levy as % of Total Revenue	56%	43%	40%	51%	32%	54%	73%
Expense Coverage by Admissions	40%	28%	18%	26%	34%	28%	50%
Expense Coverage by Admissions Plus Tax Levy	63%	43%	48%	65%	34%	54%	76%
Average Admission Price	\$12.62	\$6.50	\$5.41	\$5.78	\$7.78	\$5.41	\$12.04
APP/Breakeven AAP Difference	\$19.30	\$16.54	\$24.47	\$5.78	\$18.57	\$13.80	\$11.87

# Appendix 2

Table 2.1: Donor member benefits chart

BENEFITS	MEMBERSHIP	CONSERVATION CLUB DONOR MEMBERSHIP		
	FAMILY PLUS 2 \$184	KEEPER'S CIRCLE \$300 - \$599	CURATOR'S CIRCLE \$600 - \$899	DIRECTOR'S CIRCLE \$900 - \$1,249
Zoo & Gardens Admission Per Visit	2 named adults + all children + 2 guests	2 named adults + all (grand)children under 21 + 4 guests		
Additional Guests				2
Free Stroller Rental (\$6.75 - \$9.75 value per visit)				Yes
Complimentary Ride Tickets			4	4
Exclusive TAP Membership Offer for Donor Members		\$140	\$140	\$140
Tax-Deductible Contribution to Animal Conservation Help the Indianapolis Zoo lead in its efforts to protect the world's wildlife. Donor membership makes a difference!		Yes! \$116 - \$415	Yes! \$416 - \$715	Yes! \$716 - \$1,065
Complimentary Beverage Coupons		2	4	6
Early Saturday Admissions Per Year		3	3	3
Complimentary Caregiver Membership Add-On (\$40 value)		•	•	•
Subscription to the Inside the Zoo donor magazine		•	•	•
Invitations to Exclusive Donor Events		•	•	•
Conservation Photography Club for Members Only	\$20	Free	Free	Free
Subscription to the Indianapolis Zoo Magazine and Monthly Members-Only eNews	•	•	•	•
Invitations to Members Only Events	•	•	•	•
Exclusive Members Only Entrance Gate	•	•	•	•
Parking at the Zoo (\$6 - \$9 value per visit)	Free	Free	Free	Free
Admission to Christmas at the Zoo, Halloween ZooBoo, and Animals & All That Jazz	Free	Free	Free	Free
Zoo Gift Shop Discount	15%	15%	15%	15%
Discount on Dolphin In-Water Adventure	•	•	•	•
Early Registration and Discounts on Zoo Camps	•	•	•	•
Discount on Birthday Parties at the Zoo	•	•	•	•
Discount on General Admission for Up to 6 Guests	•	•	•	•
Discount on TAP Purchase (\$2 value per visit)	•	•	•	•

Table 2.2: Member benefits chart

BENEFITS	BEST VALUE MEMBERSHIPS					
	INDIVIDUAL & GUEST \$116	FAMILY BASIC \$136	GRANDPARENT BASIC \$136	INDIVIDUAL PLUS 4 \$184	FAMILY PLUS 2 \$184	GRANDPARENT PLUS 2 \$184
Zoo & Gardens Admission Per Visit	1 named adult + 1 guest	2 named adults + all children under 21	2 named adults + all grandchildren under 21	1 named adult	2 named adults + all children under 21	2 named adults + all grandchildren under 21
Additional Guests Per Visit				4 guests	2 guests	2 guests
Associate Council Membership				\$50		
Caregiver Membership Add-On		\$40	\$40		\$40	\$40
Conservation Photography Club for Members Only	\$20	\$20	\$20	\$20	\$20	\$20
Subscription to the Indianapolis Zoo Magazine and Monthly Members Only eNews	•	•	•	•	•	•
Invitations to Members Only Events	•	•	•	•	•	•
Exclusive Members Only Entrance Gate	•	•	•	•	•	•
Parking at the Zoo (\$6 - \$9 value per visit)	Free	Free	Free	Free	Free	Free
Admission to Christmas at the Zoo, Halloween ZooBoo, and Animals & All That Jazz	Free	Free	Free	Free	Free	Free
Zoo Gift Shop Discount	15%	15%	15%	15%	15%	15%
Discount on Dolphin In-Water Adventure	•	•	•	•	•	•
Early Registration and Discounts on Zoo Camps	•	•	•	•	•	•
Discount on Birthday Parties at the Zoo	•	•	•	•	•	•
Discount on General Admission for Up to 6 Guests	•	•	•	•	•	•
Discount on TAP Purchase (\$2 value per visit)	•	•	•	•	•	•

## Appendix 2

Table 2.3: Year Totals - Actual Memberships Purchased

	YEAR TOTALS- ACTUALS									
	2013	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	2014/2015	Rate	Revenue	% of Total (Mem)	% of Total (Rev)
Family Plus 2	10,200	175	1,785,000	27.87%	27.06%	14,032	184	2,581,888	28.73%	29.25%
Grandparent Plus 2	3,934	175	688,450	10.75%	10.44%	5,552	184	1,021,568	11.37%	11.57%
Individual & Guest	2,588	109	282,092	7.07%	4.28%	3,396	116	393,936	6.95%	4.46%
Family Basic	15,734	129	2,029,686	42.99%	30.77%	20,028	136	2,723,808	41.01%	30.86%
Grandparent Basic	1,877	129	242,133	5.13%	3.67%	2,595	136	352,920	5.31%	4.00%
Individual Plus 4	839	175	146,825	2.29%	2.23%	1,767	184	325,128	3.62%	3.68%
Keeper's Circle	798	300	239,400	2.18%	3.63%	735	300	220,500	1.50%	2.50%
Curator's Circle	66	600	39,600	0.18%	0.60%	69	600	41,400	0.14%	0.47%
Director's Circle	51	900	45,900	0.14%	0.70%	39	900	35,100	0.08%	0.40%
<b>TOTAL KEEPER, CURATOR, DIRECTOR</b>	<b>915</b>		<b>324,900</b>	<b>2.50%</b>	<b>4.93%</b>	<b>843</b>		<b>297,000</b>	<b>1.73%</b>	<b>3.36%</b>
Chairman's Circle	278	1,250	347,500	0.76%	5.27%	347	1,250	433,750	0.71%	4.91%
Naturalist's Circle	106	2,500	265,000	0.29%	4.02%	108	2,500	270,000	0.22%	3.06%
Guardian's Circle	21	5,000	105,000	0.06%	1.59%	27	5,000	135,000	0.06%	1.53%
Conservationist's Circle	14	10,000	140,000	0.04%	2.12%	12	10,000	120,000	0.02%	1.36%
Steward's Circle	9	25,000	225,000	0.02%	3.41%	6	25,000	150,000	0.01%	1.70%
Associate Council Individual +1	55	159	8,745	0.15%	0.13%	91	166	15,106	0.19%	0.17%
Associate Council Individual Plus 4	6	225	1,350	0.02%	0.02%	10	234	2,340	0.02%	0.03%
Associate Council Family Basic	21	179	3,759	0.06%	0.06%	17	186	3,162	0.03%	0.04%
Associate Council Family Plus 2	2	225	450	0.01%	0.01%	7	234	1,638	0.01%	0.02%
Regular Memberships	35,172		5,174,186	96.10%	78.45%	47,370		7,399,248	96.99%	83.82%
Donor Memberships	1,427		1,421,704	3.90%	21.55%	1,468		1,427,996	3.01%	16.18%
<b>TOTALS</b>	<b>36,599</b>		<b>6,595,890</b>	<b>100.00%</b>	<b>100.00%</b>	<b>48,838</b>		<b>8,827,244</b>	<b>100.00%</b>	<b>100.00%</b>

Table 2.4: Year Totals - Increase Keeper's Circle to to 3% (Family Plus 2 to Keeper's Circle)

	YEAR TOTALS- Increase Keeper's Circle to 3% (Family Plus 2 to Keeper's Circle)									
	2013	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	2014/2015	Rate	Revenue	% of Total (Mem)	% of Total (Rev)
Family Plus 2	9,900	175	1,732,480	27.05%	26.12%	13,299	184	2,447,095	27.23%	27.46%
Grandparent Plus 2	3,934	175	688,450	10.75%	10.38%	5,552	184	1,021,568	11.37%	11.46%
Individual & Guest	2,588	109	282,092	7.07%	4.25%	3,396	116	393,936	6.95%	4.42%
Family Basic	15,734	129	2,029,686	42.99%	30.60%	20,028	136	2,723,808	41.01%	30.56%
Grandparent Basic	1,877	129	242,133	5.13%	3.65%	2,595	136	352,920	5.31%	3.96%
Individual Plus 4	839	175	146,825	2.29%	2.21%	1,767	184	325,128	3.62%	3.65%
Keeper's Circle	1,098	300	329,434	<b>3.00%</b>	4.97%	1,468	300	440,271	<b>3.00%</b>	4.94%
Curator's Circle	66	600	39,600	0.18%	0.60%	69	600	41,400	0.14%	0.46%
Director's Circle	51	900	45,900	0.14%	0.69%	39	900	35,100	0.08%	0.39%
<b>TOTAL KEEPER, CURATOR, DIRECTOR</b>	<b>1,215</b>		<b>414,934</b>	<b>3.32%</b>	<b>6.26%</b>	<b>1,576</b>		<b>516,771</b>	<b>3.23%</b>	<b>5.80%</b>
Chairman's Circle	278	1,250	347,500	0.76%	5.24%	347	1,250	433,750	0.71%	4.87%
Naturalist's Circle	106	2,500	265,000	0.29%	3.99%	108	2,500	270,000	0.22%	3.03%
Guardian's Circle	21	5,000	105,000	0.06%	1.58%	27	5,000	135,000	0.06%	1.51%
Conservationist's Circle	14	10,000	140,000	0.04%	2.11%	12	10,000	120,000	0.02%	1.35%
Steward's Circle	9	25,000	225,000	0.02%	3.39%	6	25,000	150,000	0.01%	1.68%
Associate Council Individual +1	55	159	8,745	0.15%	0.13%	91	166	15,106	0.19%	0.17%
Associate Council Individual Plus 4	6	225	1,350	0.02%	0.02%	10	234	2,340	0.02%	0.03%
Associate Council Family Basic	21	179	3,759	0.06%	0.06%	17	186	3,162	0.03%	0.04%
Associate Council Family Plus 2	2	225	450	0.01%	0.01%	7	234	1,638	0.01%	0.02%
Regular Memberships	34,872		5,121,666	95.28%	77.21%	46,637		7,264,455	95.49%	81.51%
Donor Memberships	1,727		1,511,738	4.72%	22.79%	2,201		1,647,767	4.51%	18.49%
<b>TOTALS</b>	<b>36,599</b>		<b>6,633,404</b>	<b>100.00%</b>	<b>100.00%</b>	<b>48,838</b>		<b>8,912,222</b>	<b>100.00%</b>	<b>100.00%</b>

## Appendix 2

Table 2.5: Year Totals - Increase Keeper's Circle to 5% (Family Plus 2 to Keeper's Circle)

YEAR TOTALS- Increase Keeper's Circle to 5% (Family Plus 2 to Keeper's Circle)											
	2013	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	2014/2015	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	
Family Plus 2	9,168	175	1,604,384	25.05%	23.86%	12,323	184	2,267,371	25.23%	25.12%	
Grandparent Plus 2	3,934	175	688,450	10.75%	10.24%	5,552	184	1,021,568	11.37%	11.32%	
Individual & Guest	2,588	109	282,092	7.07%	4.19%	3,396	116	393,936	6.95%	4.36%	
Family Basic	15,734	129	2,029,686	42.99%	30.18%	20,028	136	2,723,808	41.01%	30.18%	
Grandparent Basic	1,877	129	242,133	5.13%	3.60%	2,595	136	352,920	5.31%	3.91%	
Individual Plus 4	839	175	146,825	2.29%	2.18%	1,767	184	325,128	3.62%	3.60%	
Keeper's Circle	1,830	300	549,027	5.00%	8.16%	2,444	300	733,299	5.00%	8.12%	
Curator's Circle	66	600	39,600	0.18%	0.59%	69	600	41,400	0.14%	0.46%	
Director's Circle	51	900	45,900	0.14%	0.68%	39	900	35,100	0.08%	0.39%	
<b>TOTAL KEEPER, CURATOR, DIRECTOR</b>	<b>1,947</b>		<b>634,527</b>	<b>5.32%</b>	<b>9.44%</b>	<b>2,552</b>		<b>809,799</b>	<b>5.23%</b>	<b>8.97%</b>	
Chairman's Circle	278	1,250	347,500	0.76%	5.17%	347	1,250	433,750	0.71%	4.81%	
Naturalist's Circle	106	2,500	265,000	0.29%	3.94%	108	2,500	270,000	0.22%	2.99%	
Guardian's Circle	21	5,000	105,000	0.06%	1.56%	27	5,000	135,000	0.06%	1.50%	
Conservationist's Circle	14	10,000	140,000	0.04%	2.08%	12	10,000	120,000	0.02%	1.33%	
Steward's Circle	9	25,000	225,000	0.02%	3.35%	6	25,000	150,000	0.01%	1.66%	
Associate Council Individual +1	55	159	8,745	0.15%	0.13%	91	166	15,106	0.19%	0.17%	
Associate Council Individual Plus 4	6	225	1,350	0.02%	0.02%	10	234	2,340	0.02%	0.03%	
Associate Council Family Basic	21	179	3,759	0.06%	0.06%	17	186	3,162	0.03%	0.04%	
Associate Council Family Plus 2	2	225	450	0.01%	0.01%	7	234	1,638	0.01%	0.02%	
Regular Memberships	34,140		4,993,570	93.28%	74.25%	45,661		7,084,731	93.49%	78.50%	
Donor Memberships	2,459		1,731,331	6.72%	25.75%	3,177		1,940,795	6.51%	21.50%	
<b>TOTALS</b>	<b>36,599</b>		<b>6,724,901</b>	<b>100.00%</b>	<b>100.00%</b>	<b>48,838</b>		<b>9,025,526</b>	<b>100.00%</b>	<b>100.00%</b>	

Table 2.6: Year Totals - Increase Keeper's Circle to 8% (Family Plus 2 to Keeper's Circle)

YEAR TOTALS- Increase Keeper's Circle to 8% (Family Plus 2 to Keeper's Circle)											
	2013	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	2014/2015	Rate	Revenue	% of Total (Mem)	% of Total (Rev)	
Family Plus 2	8,070	175	1,412,239	22.05%	20.58%	10,858	184	1,997,786	22.23%	19.13%	
Grandparent Plus 2	3,934	175	688,450	10.75%	10.03%	5,552	184	1,021,568	11.37%	9.78%	
Individual & Guest	2,588	109	282,092	7.07%	4.11%	3,396	116	393,936	6.95%	3.77%	
Family Basic	15,734	129	2,029,686	42.99%	29.58%	20,028	136	2,723,808	41.01%	26.08%	
Grandparent Basic	1,877	129	242,133	5.13%	3.53%	2,595	136	352,920	5.31%	3.38%	
Individual Plus 4	839	175	146,825	2.29%	2.14%	1,767	184	325,128	3.62%	3.11%	
Keeper's Circle	2,928	300	878,419	8.00%	12.80%	3,909	300	1,172,841	8.00%	11.23%	
Curator's Circle	66	600	39,600	0.18%	0.58%	69	600	41,400	0.14%	0.40%	
Director's Circle	51	900	45,900	0.14%	0.67%	39	900	35,100	0.08%	0.34%	
<b>TOTAL KEEPER, CURATOR, DIRECTOR</b>	<b>3,045</b>		<b>963,919</b>	<b>8.32%</b>	<b>14.05%</b>	<b>4,017</b>		<b>1,249,341</b>	<b>8.23%</b>	<b>11.96%</b>	
Chairman's Circle	278	1,250	347,500	0.76%	5.06%	347	1,250	433,750	0.71%	4.15%	
Naturalist's Circle	106	2,500	265,000	0.29%	3.86%	108	2,500	270,000	0.22%	2.59%	
Guardian's Circle	21	5,000	105,000	0.06%	1.53%	27	5,000	135,000	0.06%	1.29%	
Conservationist's Circle	14	10,000	140,000	0.04%	2.04%	12	10,000	120,000	0.02%	1.15%	
Steward's Circle	9	25,000	225,000	0.02%	3.28%	6	25,000	150,000	0.01%	1.44%	
Associate Council Individual +1	55	159	8,745	0.15%	0.13%	91	166	15,106	0.19%	0.14%	
Associate Council Individual Plus 4	6	225	1,350	0.02%	0.02%	10	234	2,340	0.02%	0.02%	
Associate Council Family Basic	21	179	3,759	0.06%	0.05%	17	186	3,162	0.03%	0.03%	
Associate Council Family Plus 2	2	225	450	0.01%	0.01%	7	234	1,638	0.01%	0.02%	
Regular Memberships	33,042		4,801,425	90.28%	69.97%	44,196		6,815,146	90.49%	65.25%	
Donor Memberships	3,557		2,060,723	9.72%	30.03%	4,642		3,629,678	9.51%	34.75%	
<b>TOTALS</b>	<b>36,599</b>		<b>6,862,148</b>	<b>100.00%</b>	<b>100.00%</b>	<b>48,838</b>		<b>10,444,824</b>	<b>100.00%</b>	<b>100.00%</b>	

## Appendix 3

### Appendix 3.1

The following regression model was used to determine significance of the daily markup variable on total TAP ticket sales.

Dependent Variable: Natural Log of Daily Total TAP Attendance

#### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	13	638.32918	49.10224	59.17	<.0001
Error	218	180.90999	0.82986		
Corrected Total	231	819.23917			

Root MSE	0.91097	R-Square	0.7792
Dependent Mean	5.05113	Adj R-Sq	0.7660
Coeff Var	18.03491		

#### Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	Standardized Estimate	Variance Inflation
Intercept	Intercept	1	6.53504	2.88523	2.26	0.0245	0	0
Monday	Monday	1	-0.04052	0.27347	-0.15	0.8823	-0.00763	2.61506
Tuesday	Tuesday	1	-0.19291	0.28157	-0.69	0.4940	-0.03586	2.70416
Wednesday	Wednesday	1	0.03279	0.28489	0.12	0.9085	0.00610	2.76830
Thursday	Thursday	1	-0.12519	0.27457	-0.46	0.6489	-0.02297	2.50603
Friday	Friday	1	0.07700	0.25628	0.30	0.7641	0.01431	2.24028
Saturday	Saturday	1	-0.11653	0.23008	-0.51	0.6130	-0.02166	1.80561
Time	Time	1	0.04362	0.00775	5.63	<.0001	1.56439	76.30283
timesq	timesq	1	-0.00016917	0.00002838	-5.96	<.0001	-1.46527	59.63229
Rain	Rain	1	-0.78818	0.22607	-3.49	0.0006	-0.13109	1.39573
MaxTemp	MaxTemp	1	0.01298	0.00767	1.69	0.0918	0.08823	2.68081
Event1	Event1	1	0.03652	0.14287	0.26	0.7985	0.00972	1.42613
TotalA	TotalA	1	0.00022604	0.00002786	8.11	<.0001	0.39162	2.29947
Inrelative	Inrelative	1	-1.34027	0.65053	-2.06	0.0406	-0.17708	7.29244

*Total Tap Purchased*

$$\begin{aligned} &= \beta_1 + \beta_2 \text{Monday} + \beta_3 \text{Tuesday} + \beta_4 \text{Wednesday} + \beta_5 \text{Thursday} \\ &+ \beta_6 \text{Friday} + \beta_6 \text{Saturday} + \beta_7 \text{Time} + \beta_8 \text{Timesq} + \beta_9 \text{Rain} + \beta_{10} \text{MaxTemp} \\ &+ \beta_{11} \text{Event1} + \beta_{12} \text{Total} + \beta_{13} \ln \text{Relative} \end{aligned}$$

## Assumptions

- Standard Admission prices for adults were applied to all categories
- The "event1" variable included any major weather events throughout 2013
- The "lnrelative" variable is the natural log of the daily markup
- The "totalA" variable is total attendance

## Appendix 3

### Appendix 3.2

The following regression model was used to find the optimal markup price for TAP that would maximize revenue.

Dependent Variable: Revenue

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	1271939342	90852810	72.39	<.0001
Error	217	272328972	1254972		
Corrected Total	231	1544268314			

Root MSE	1120.25543	R-Square	0.8237
Dependent Mean	2883.00000	Adj R-Sq	0.8123
Coeff Var	38.85728		

$$\begin{aligned} \text{revenue} = & \beta_1 + \beta_2 \text{Monday} + \beta_3 \text{Tuesday} + \beta_4 \text{Wednesday} + \beta_5 \text{Thursday} + \beta_6 \text{Friday} \\ & + \beta_6 \text{Saturday} + \beta_7 \text{Time} + \beta_8 \text{Timesq} + \beta_9 \text{Rain} + \beta_{10} \text{MaxTemp} \\ & + \beta_{11} \text{Event1} + \beta_{12} \text{Totala} + \beta_{13} \text{Relative} + \beta_{14} \text{Relativesq} \end{aligned}$$

#### Assumptions

Standard Admission prices for adults were applied to all categories

Members paid 9\$ per ticket for TAP

The "event1" variable included any major weather events throughout 2013

The "relative" variable is the percentage of the daily markup

The "relativesq" variable is percentage of the daily markup squared

The following equation is an application of the optimal markup rule that solves for the optimal markup price.

$$\text{Optimal Markup} = -\left(\frac{-8026.52444}{(7560.41 * 2)}\right)$$

$$\text{Optimal Markup} = 42\%$$



## Parameter Estimates

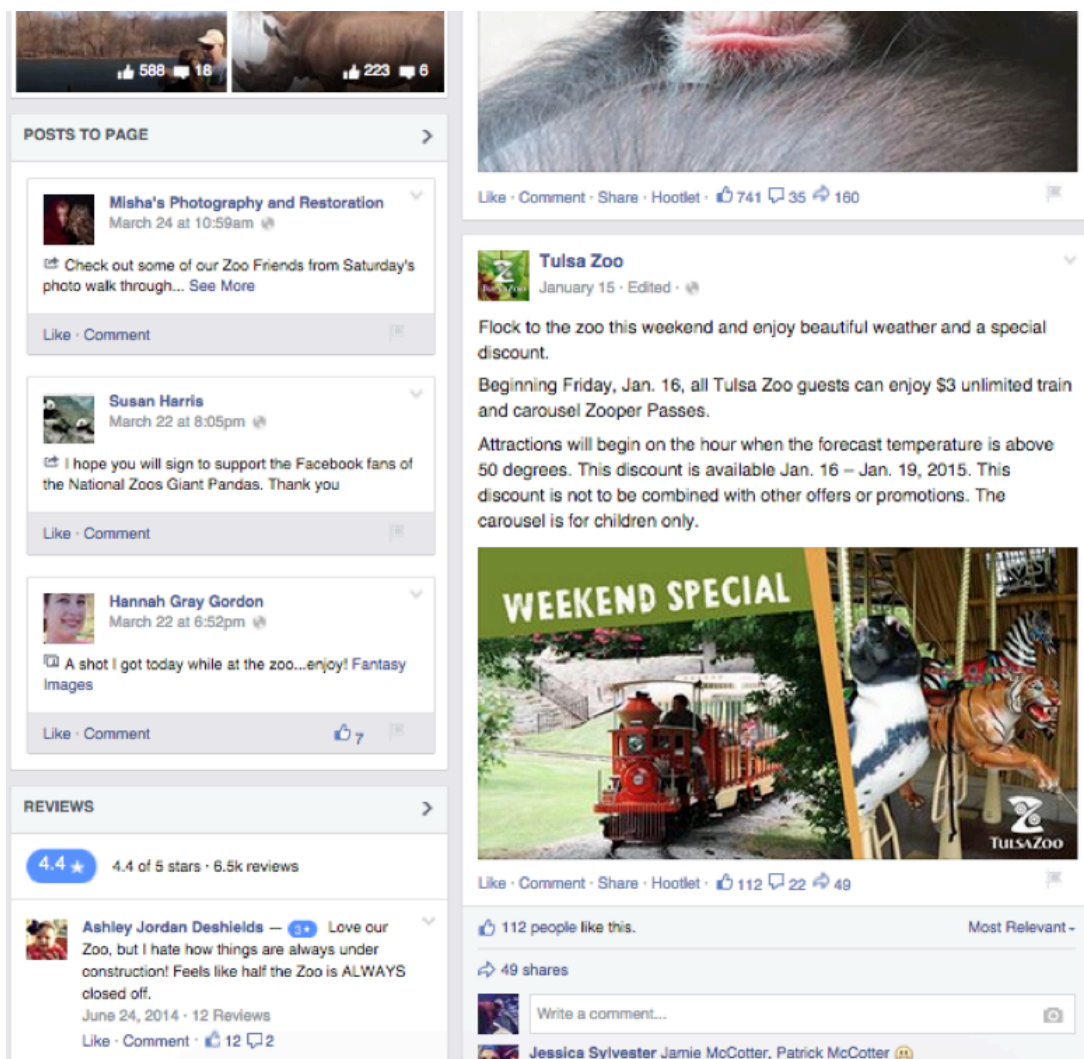
Variable	Label	D F	Parameter Estimate	Standar d Error	t Value	Pr >  t	Standardize d Estimate	Variance Inflation
Intercept	Intercept	1	-1094.13013	1916.58105	-0.57	0.5687	0	0
Monday	Monday	1	-57.53636	346.94556	-0.17	0.8684	-0.00789	2.78320
Tuesday	Tuesday	1	-464.50355	358.49261	-1.30	0.1965	-0.06289	2.89871
Wednesday	Wednesday	1	-331.48545	362.04725	-0.92	0.3609	-0.04488	2.95648
Thursday	Thursday	1	-534.20800	352.48846	-1.52	0.1311	-0.07140	2.73116
Friday	Friday	1	-587.86534	326.99217	-1.80	0.0736	-0.07959	2.41168
Saturday	Saturday	1	569.16284	285.00866	2.00	0.0471	0.07706	1.83215
Time	Time	1	65.03769	9.66960	6.73	<.0001	1.69890	78.50761
timesq	timesq	1	-0.24678	0.03526	-7.00	<.0001	-1.55682	60.89838
Rain	Rain	1	-592.68158	278.74127	-2.13	0.0346	-0.07180	1.40307
MaxTemp	MaxTemp	1	-2.10351	9.47201	-0.22	0.8245	-0.01041	2.70454
Event1	Event1	1	67.29785	175.79971	0.38	0.7022	0.01304	1.42791
TotalA	TotalA	1	0.56041	0.03455	16.22	<.0001	0.70720	2.33956
Relative	Relative	1	-8026.52444	4571.13370	-1.52	0.1295	-0.39961	84.82593
Relativesq	Relativesq	1	9348.54987	2971.97274	2.54	0.0117	0.57299	62.42873

## Appendix 3

### Appendix 3.3: Benchmarked Total Adventure Package Promotional Suggestions

#### Example 1: Tulsa Zoo, Zooper Passes

Best Practice: Utilize social media to drive promotion



The image shows a screenshot of a Facebook page for the Tulsa Zoo. The page is divided into several sections. At the top, there are two small images: one of a person with a camera and another of a large animal. Below these are three posts from other users: Misha's Photography and Restoration, Susan Harris, and Hannah Gray Gordon. The main content area features a post from the Tulsa Zoo dated January 15, 2015, titled "WEEKEND SPECIAL". The post text reads: "Flock to the zoo this weekend and enjoy beautiful weather and a special discount. Beginning Friday, Jan. 16, all Tulsa Zoo guests can enjoy \$3 unlimited train and carousel Zooper Passes. Attractions will begin on the hour when the forecast temperature is above 50 degrees. This discount is available Jan. 16 – Jan. 19, 2015. This discount is not to be combined with other offers or promotions. The carousel is for children only." Below the text is a large image of a train and a carousel horse. The post has 112 likes, 22 comments, and 49 shares. At the bottom of the page, there is a review section showing a 4.4 star rating from 6.5k reviews, with a recent review from Ashley Jordan Deshields dated June 24, 2014.

The Tulsa Zoo sells one-day wristbands that allow for unlimited train and carousel rides at the zoo. Passes are \$5.50 for non-Members and \$4 per person for members. General admission to the zoo is \$10.00 for adults and \$6.00 for children (Tulsa Zoo, 2015). Like most zoos benchmarked, the Tulsa Zoo is active on social media. To help promote their Zooper Passes, Tulsa placed a weekend flash sale on their Facebook page to talk about the Zooper program. The image was shared with all existing fans of the page and any new visitors to the page. By utilizing their social media, they were able to share details of the program without cost to individuals.

Example 2: Oregon Zoo, Zoo Keys

Best Practice: Integrating special event marketing into zoo promotions, contests, and marketing

**The Oregon Zoo turns 125 this year!**  
Celebrate by sharing your zoo photos and you could win a commemorative zoo125 prize. Here's how:

- 1 Find your zoo history –**  
Any Oregon Zoo photo or memorabilia –  
The older, the better.
- 2 Take a picture –**  
with your smartphone, camera  
or scanner.
- 3 Upload –**  
Via the contest tab on  
Oregon Zoo's Facebook page.  
You can also post to  
Twitter or Instagram  
with hashtag #zoo125 and it  
will be entered automatically.

Vote for your favorite photos on the  
Zoo125 Photo Contest tab.  
ENTRIES MUST BE POSTED BY JUNE 11.  
VOTING ENDS JUNE 12.

**OREGON ZOO 125**  
Community supported since 1888

The Oregon Zoo offers patrons the chance to purchase zoo keys for \$2.50. Zoo keys are special keys allow users to unlock the “secrets of the zoo and learn about favorite animals at talk boxes on zoo grounds.” Keys give special information about bats, black bears, bald eagles, elephants, giraffes, otters, and 15 other animals. Regular zoo admission is \$11.50 for adults and \$8.50 for children (Oregon Zoo, 2015). In the advertisement, the Oregon Zoo celebrated its 125th anniversary with a promotional event that encouraged patrons to take photographs and share them to win prizes. Included in all messaging and promotion of the event were the Zoo Keys (as pictured with the blue key above). Rather than promoting just the Zoo Keys for a promotion, they are integrated into the marketing and promotion of the anniversary event. By allocating marketing dollars to the promotion and making Zoo Keys an integral part, patrons are involved in the zoo as a whole but aware of the key program.

## Appendix 3

### Example 3: Singapore Zoo, Park Hopper Specials

Best Practice: Using cross-location promotion and appealing in-park advertisements to drive ticket sales

**ENJOY WILD SAVINGS WITH**  
**PARKHOPPER**  
 4 Park Admissions **\$103** Save **\$24**

<b>PARKHOPPER</b> (Admission + Tram Ride)	Adult	Child (2-12yr)
<b>4-in-1</b> Save \$24 Zoo + River Safari + Night Safari + Bird Park	\$103	\$65
<b>3-in-1</b> Save \$14 Zoo + Night Safari + Bird Park	\$88	\$56
Zoo + Night Safari + River Safari	\$83	\$53
River Safari + Night Safari + Bird Park	\$80	\$51
Zoo + River Safari + Bird Park	\$74	\$47
<b>2-in-1</b> Save \$8 Zoo + Night Safari	\$64	\$41
River Safari + Night Safari	\$56	\$36
Zoo + Bird Park	\$55	\$35
Zoo + River Safari	\$50	\$32
River Safari + Bird Park	\$47	\$30

<b>RIVER SAFARI</b>	Adult	Child (2-12yr)
Admission	\$25	\$16

<b>SINGAPORE ZOO</b>	Adult	Child (2-12yr)
Admission + Tram Ride	\$33	\$21
Admission only	\$28	\$18

Wildlife Reserves Singapore Group

The Singapore Zoo works with other local parks to drive the sale of their "Park Hopper Specials." Regular admission for the Singapore Zoo is \$32.00 for adults, \$21.00 for children, and \$14.00 for senior citizens. Park Hopper tickets allow visitors to visit each park in their package once. Parks included in the 4-in-1 Park Hopper (\$121 for adults and \$78 for children) are the Singapore Zoo, Night Safari, River Safari, and the Jurong Bird Park. Certain packages include tram rides or cruise boat rides in the spaces (Wildlife Reserves Singapore Group, 2014). At the entrance to each of these parks, a large colorful billboard describes the pricing options to visitors. By keeping consistent branding, multiple locations of the sign, and cross location promotion of the tickets, Singapore is able to better market their options. In addition, the colorful signs draw visitors' attentions to the ticket options and may have sparked the purchase of additional tickets from individuals. The zoo offers all of this information on their website to sell the special ticket as well (see next page).

**USEFUL INFO**

80 Mandai Lake Road  
Singapore 729826  
Tel: (65) 6269 3411  
Info.zoo@wrs.com.sg

**Opening Hours:**  
8.30am to 6.00pm daily  
(Last ticket sale at 5.30pm)

[GETTING HERE](#)

[BUY TICKETS](#)

[PARK MAP](#)

[EVENTS & PROMOS](#)

**BUY TICKETS ONLINE AND SAVE AN EXTRA 10%**

Enjoy multi-park savings with our Park Hopper Specials.

	Admission	Per Adult	Per Child** (3 - 12 years old)
<b>4-in-1 Park Hopper</b>	Singapore Zoo	<b>\$121.00</b>	<b>\$78.00</b>
	Night Safari	(Save \$24.00)	(Save \$16.00)
	River Safari	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>
	Jurong Bird Park		
<b>3-in-1 Park Hopper</b>	Singapore Zoo	<b>\$98.00</b>	<b>\$64.00</b>
	Night Safari	(Save \$14.00)	(Save \$9.00)
	Jurong Bird Park	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>
	Singapore Zoo	<b>\$98.00</b>	<b>\$64.00</b>
	Night Safari	(Save \$14.00)	(Save \$9.00)
	River Safari	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>
<b>2-in-1 Park Hopper</b>	Singapore Zoo	<b>\$89.00</b>	<b>\$57.00</b>
	River Safari	(Save \$14.00)	(Save \$9.00)
	Jurong Bird Park	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>
	Singapore Zoo	<b>\$71.00</b>	<b>\$47.00</b>
	Night Safari	(Save \$8.00)	(Save \$5.00)
	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>	
<b>2-in-1 Park Hopper</b>	Singapore Zoo	<b>\$62.00</b>	<b>\$40.00</b>
	Jurong Bird Park	(Save \$8.00)	(Save \$5.00)
	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>	
<b>2-in-1 Park Hopper</b>	Singapore Zoo	<b>\$62.00</b>	<b>\$40.00</b>
	River Safari	(Save \$8.00)	(Save \$5.00)
	<a href="#">BUY NOW</a>	<a href="#">BUY NOW</a>	

**Jungle Breakfast with Wildlife**

Enjoy a buffet spread of western-style and local delights, and take a photo with the charming apes and other forest animals.

**Venue:** Ah Meng Restaurant (Terrace)  
**Daily:** 9.00am - 10.30am (Daily)

[READ MORE](#)

## Appendix 3

### Appendix 3.4 Special Ticket Benchmarking

This section offers product benchmarking as a continuation of the product analysis. Benchmarking will help define best practices and identify essential improvement opportunities while maintaining a competitive environment in key markets. We looked externally to other competitors' value added packages that appeal to similar demographics of TAP. The following section outlines a variety of market competitors offering similar and non-similar value added packaging to the Total Adventure Package.

#### Zoos with Value Added Packages

Name of Zoo and Package	Cost	Product Description
Houston Zoo, Special Value Passes	\$18.50 for kids, \$19.50 for adults	<p>A Child Value Pass includes Zoo admission, 4-D Experience movie, and carousel ride. Accounts for a saving of \$1.50 for regular price.</p> <p>Adult value pass includes zoo admission and a 4-D Experience movie. Carousel ride can be added for \$2.50.</p> <p>Regular admission prices for children is \$12 and adults is \$16. Carousel tickets are \$2 for Members and \$3 for non-members. 4-D Experience is \$4 for Members and \$5 for non-members. Giraffe feeding platform is \$5 and not offered through the Special Value Pass.</p>
Phoenix Zoo, Total Experience Ticket and the Value Ticket	Total Experience Ticket- \$36 for adults, \$30 for children, and \$14 for a Member upgrade. Value Ticket is \$28 for adults, \$22 for children and \$8 for a Member upgrade	<p>Total Experience Ticket includes Phoenix Zoo admission, 4-D theatre, Stingray Bay, Carousel, Camel Rides, and the Safari Train. Limit of one visit/ride per person per venue; the Carousel is unlimited. Save 30% on additional experiences during the visit. Must be purchased at the zoo, online purchase not available.</p> <p>Value Ticket includes Phoenix Zoo admission, 4-D theatre, Stingray Bay and Safari Train. Accounts for one visit/ride per person per venue. Save 40% on additional experiences during the visit. Must be purchased at the zoo.</p> <p>General Zoo admission is \$20 for adults and \$14 for children.</p>

Jacksonville Zoo, Value Tickets	\$27.95 for adults, \$25.95 for seniors, and \$20.95 for children	Value Tickets include zoo admission, Sea Lion Splash Experience, Stingray Bay, 4D Ride and unlimited Train & Carousel Rides. Monday Value Bands will include Giraffe feeding instead of Sea Lion Splash presentations.  General Zoo admission is \$16.95 for adults, \$14.95 for seniors, and \$11.95 for children.
Atlanta Zoo, Premium Pass	\$44.99 for adult premium pass and \$36.99 for child premium pass	Premium passes include general admission, unlimited rides, one certificate for a lunch basket & fountain drink and a \$10 gift shop voucher.  General admission for Zoo Atlanta is \$22.99 for adults and \$17.99 for children.
Oregon Zoo, Zoo Keys	\$2.50	Special keys allow users to unlock the “secrets of the zoo and learn about favorite animals at talk boxes on zoo grounds.” Keys give special information about bats, black bears, bald eagles, elephants, giraffes, otters, and 15 other animals. Regular zoo admission is \$11.50 for adults and \$8.50 for children.
Tulsa Zoo, Zooper Passes	\$5.50 for non-Members and \$4 per person for members	One-day wristband for unlimited train and carousel rides.  General admission for the zoo is \$10.00 for adults and \$6.00 for children.

## Appendix 3

### Other Attractions with Value Added Packages

Name of Location and Package	Cost	Product Description
The Grand Prix of Indianapolis Bronze Badge	\$125	Fans can purchase a Bronze Badge that provides access to the historic Gasoline Alley, known as the Garage Area. Bronze Badges will be honored at the Indianapolis Motor Speedway for gate admission and garage access during the race.  Reserved seats and 2 days general admission tickets are \$41.
Indiana State Museum and Historic Sites, Combo Package	\$24.75 for adults, \$24 for seniors, \$17.50 for children	Combo package includes admission to the Museum and IMAX Special Engagement.  Regular museum admission is \$13 for adults, \$12 for seniors, and \$8.50 for children. IMAX tickets are regularly \$13 for adults, \$13 for seniors, and \$11 for children.
Indiana Repertory Theatre, Encore! Care	\$50	Any student can see any play as many times as they would like. For a one-time fee of \$50, students have access to any play, any time, as many times as they would like.
Dinosaur World Kentucky, Adult Excavation	\$19.03 for adult and \$16.91 for children	Excavation passes include admission and a Lucky Strike Gem bag for the Dino Gem Excavation.  General admission for adults is \$12.46 and \$9.28 for children.
Safari Land, Wristband Special	\$15 for adults and children Monday-Friday  \$20 for adults and children Saturday, Sunday, and holidays	Passes include unlimited use of bumper cars, tilt-a-whirl, monkey jump, lion's den, and merry go round. Also includes 2 rides on kiddie go-karts, 2 rides on roller coaster, 2 rides on max flight.



### Appendix 4.1: External Research for Programming Recommendations

Below is a list of program ideas, organized by goal that they target, compiled from other zoos and area attractions. These ideas were included on this list if they were absent from the Indianapolis Zoo or if we thought the ideas could improve on existing Zoo programming. It seems reasonable, dependent on the design, that the below programs could be easy to implement, produce revenue, and be offered in the fall and winter months.

#### 1. Expand Customer Base

Programs targeting seniors

- Senior Safari, Grandparents Day, Walking Club

Programs or activities that appeal to middle school and high school students

- Career Day, Courses offered at the Zoo for high school/college credit
- Zoo-to-You classes (Zoo-educator can make on-site visit for a fee)

Could visit classrooms, public places (mall, downtown areas), or skype-in to meetings/class lessons

- Zookeeper Guide. Series of classes where pay fee for each class. At end of series, can lead groups around the zoo, perhaps on a family day.

#### 2. Encouraging Existing Customers to Spend More Money

Programs or activities that provide childcare, services for babies and small children

- Preschool, Parent's Night or Day Out events, Stroller Buddies

Programs targeting adults

- Classes or lectures. Some topics that we've come across: Photography, observing animals/researching methods, building a habitat, sex lives of animals, landscaping/gardening
- Music events (could have live music inspired by nature or animals)

Other attractions

- Rock climbing wall, scuba diving, snorkeling

## Appendix 4

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### 3. Flatten Revenues Across the Year

#### Programs for winter and fall fundraising

- Get Your Praise On (gospel music celebration for Black History Month); Zoodiac-a celebration of lights for the Chinese New Year (Jan-Feb), Day of the Child (April), Zoo-To-Do for Kids (could be anytime), Zoominations (Chinese lantern festival: this zoo did it at the end of Feb into March), Polar Plunge (go in the cold water in the winter), Zoo Fiesta (Hispanic Heritage Month in September), Oscar Party/Hollywood Event (Feb.)

#### Themed days

- Colts day (could the players come? special discount if you wear a jersey?); "Say Cheese": professional pictures at the zoo; Fairytale Luncheon with a Children's Theater; Zooperts day (a day for people who love zoos. If have Membership in a conservation organization, that allows you to attend. That way can enjoy zoo with others who have a passion for animals and conservation).

### 4. Multi-Goal Endeavors

#### Run/walk through the Zoo, 5k or more (Dennis- not a good fit because of how it affects zoo experience)

- "Zoo Run," "Throo the Zoo," "Cheetah Run"
- Existing customers might be interested if there were some sort of behind-the-scenes sections of the course. Could hold it in September/October when the weather is still tolerable.

We researched the following organizations:

- Audubon Zoo
- Brookfield Zoo
- Children’s Museum of Indianapolis
- Cincinnati Zoo
- Columbus Zoo
- Connor Prairie Attractive
- Dallas Zoo
- Deep River Waterpark
- Detroit Zoo
- Holiday World Water Park
- Houston Zoo
- Indianapolis Museum of Art
- Lincoln Park Zoo
- Los Angeles Zoo
- Louisville Zoo
- Lowry Park Zoo
- Memphis Zoo
- Milwaukee County Zoo
- Monon Water Park (part of Carmel Clay Parks & Recreation)
- National Zoo
- Omaha Zoo
- Riverbanks Zoo
- San Diego Zoo
- The Wilds
- Toledo Zoo
- Zoo Miami

## Appendix 4

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### Appendix 4.2: Preliminary Recommendations

#### Modification/Upgrade of Existing Product/Service

Create an online account on the website.

- People could follow an animal or two
- Personalize your emails from the zoo (“I want to find out about Discount Days or Special Events”),
- Create an Account and you get (\$5 off next admission or popcorn or free Train Ride or whatever).
- People with accounts that have been paid for (\$10 a year?) can have access to one of 5(?) webcam streams of their favorite animal.
- Connect online account to phone app that offers a map of the zoo, pictures of the animals you’re connected to, and has an audio tour guide section.
- Matt hereby coins “Zoo to You!” as the title of the app

Gear Technology and Park Exhibits Toward Kids

- Things kids could climb on/touch. Exhibit for kids to build a habitat for an animal.
- Hands-on Interactive Technological Stuff. Kids like to touch things and interact. Simulations.
- A new way to teach without text: videos, Ipads/screens with interactivity. Tell stories about the animals. Screens to touch and do stuff.
- A trivia screen where a donor agrees to donate a penny per correct answer, up to a certain amount. Add this to the Zooper challenge?
- Programs for the VERY young: childcare, services for babies/small children
- They’re not into making kids pay to “volunteer” as a zookeeper, but they do have “Zoo Teen” program during the summer where the teens act like docents (and there’s no charge.) Perhaps this could be augmented, and add prices based on the content the person wants.
- Career Day for teens.

Give the Animals’ Stories.

- Back of Admission Ticket Stories. “Today your animal is Pakak! Pakak is x years old, can be found HERE in the zoo, and has been with us for x time.” Maybe make ten or fifteen of these, and offer a prize if someone collects all of them.
- Birthday Parties for the Animals, listed on the web or in a pamphlet handed out at Admissions
- Animal of the Week/Animal of the Month
- Zoo Superlatives: Have people vote on which animal they thought was cutest, strongest, ugliest, funniest. Give the animals’ exhibits “awards” or “ribbons” every month (“Last month, Pakak was voted silliest!”)
- When an animal is off-exhibit because it is sick, leave cards and crayons and paper out so kids can make get-well cards for them
- Introduce lifecycle exhibits, following the Zoo’s animals from mating through pregnancy and into birth/ adolescence

### Do more with the Dolphins

- The information we had in the special experience was really interesting. iPad or boards describing the dolphins, situated in the glass bubble underneath their tank to allow for weather protection?
- Information online about them?
- Family tree?
- Would this remove value from the Premium Experience?

### Introduction of Something Altogether New

#### Monthly Events: "Day" Days

- Couple's night, offering incentives to couples coming to visit (without kids)
- Chocolate night, coupled with the people from Endangered Animal Chocolate
- Monthly Lecture Series where you meet with a scientist or vet or trainer and have a beer/wine (ZooBrew?) to discuss some problem facing an animal or the Zoo; Adult programming in general. This could be the "Zooperts Days."
- Monthly contests for photography or movie making or costume making (around Halloween)
- Senior Day/Grandparents Day/Walking Club

#### Long-Term Events

- Chinese Lantern Festival. About a month long, lasts through February. It goes through the Winter, might bring Chinese community together at the zoo, could bring new people together. Different could sponsor lanterns (the Eli Lilly lantern, etc) and high school/middle school competitions for who has the best. Not hard to build them. Could do a build-your-own thing for a price, and add it to the wall of lanterns or whatever.
- Rescue Auction. We believe that people form good connections with animals based on the stories they hear about the animals and whether they're invested. Maybe twice a year (Spring and Fall?) the Zoo holds a voting/auction kind of thing with a list of five (?) animals that could be rescued from somewhere, and people vote/donate to determine which one gets rescued.
- Throughout March and April: Tunes and Blooms, highlighting the return of special flowers and trees blooming again, paired with music. This could also be a one-off evening.

#### One-Time Events

- Colts at The Zoo! Partner up with the Indianapolis Colts. Have them "Compete" against the animals (can the running back outrun the cheetah?). Then autographs, etc. This could work in spring, when they're not in training and zoo attendance is light.
- Get Your Praise On! Gospel Music Celebration for black history month in February
- Party with the Planet, a light fundraiser centered around conservation, in March/April where only those who are Members of conservation organizations can buy tickets

## Appendix 4

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### Appendix 4.3: Survey

#### Survey Objectives

- Gauge interest in final recommendations related to new activities, services, events and experiences that the Zoo could offer its patrons
- Evaluate willingness to pay for these new activities, services, events and experiences
- Utilize survey results to further support and/or guide development of other new initiatives that did not make the list of the final six recommendation that the capstone group focused on in the accompanying report

#### Methodology

Initiatives embedded in the survey target different age groups, and as a result, an attempt should be made to gather responses from a wide-range of ages, as well as from an economically diverse sample. Ideally, the survey would be administered at the Castleton, Greenwood, and Fashion Malls to catch diverse income groups; however, Simon malls do not allow surveys on their properties. Unless Zoo personnel are able to receive special permission to administer the survey on Simon properties, the survey should be administered in person on Zoo grounds. We anticipate the survey taking approximately five minutes, and estimate that the response goal should be to survey at least 120 respondents. To facilitate data collection, survey administrators could easily record responses on an electronic device, such as a tablet.

Survey administrators should adhere to these guidelines when administering the survey:

- Introduce themselves and explain their affiliation with the Indianapolis Zoo.
- Briefly explain that the purpose of the survey is to assess interest in possible new initiatives at the Zoo.
- Ask permission to administer the survey and tell volunteers that the survey will take approximately five minutes.
- Remind respondents that their responses are confidential.
- At the end of the survey, thank respondents for their time.
- If respondents have any questions that we cannot answer or would like information about the Zoo, take down their name and contact info (phone number or e-mail) so that the Zoo can reach out to them.
- Collect their e-mail address if they would like to see the broad, overall results of the survey, assuming such data will be available.

#### Target Survey Demographic

- People who are 18 years and older, living in Indianapolis, the Indy metro area, and counties across the state of Indiana.
- We chose the target demographic with the thought that in order to expand its customer base, the Zoo would need to augment existing programming in addition to establishing programs and event that cater to new clientele. By leaving our target demographic to be rather wide, we feel that we are best able to gauge how a wide variety of people would show interest in the tentative establishment of new programs, services and events.

## Survey Instrument

1. Have you ever visited the Indianapolis Zoo?    Yes                          No (GO TO Q5.)
2. Are you currently a member of the Zoo?      Yes (GO TO Q4.)    No
3. Have you ever been a member of the Zoo?    Yes                          No
4. When was the last time you were at the Indianapolis Zoo?  
     Never been to the Zoo  
     Less than a month ago  
     1-3 months ago  
     4-6 months ago  
     7-9 months ago  
     10 months or more ago  
     (GO TO Q7.)
5. Are any of the following statements reasons why you have not visited the Indy Zoo?  
     Not interested in seeing animals  
     I could not get there easily  
     It is too expensive (If price, how much would you pay to attend the zoo?)  
     Other:
6. If you have not visited the Indy Zoo, have you visited any other zoos?  
     Never  
     Past 10 years?  
     Past 5 years?)

### Where?

- St. Louis
- Louisville
- Cincinnati
- Brookfield Zoo (Chicago)
- Lincoln Park Zoo (Chicago)
- Toledo
- Other:

## Appendix 4

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7. What months of the year is the Indianapolis Zoo open? (Interviewers code the response by checking all below):

- All twelve months
- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

8. It currently costs \$6 to park at the Indianapolis Zoo. Suppose you could receive a valet service for \$15, including the price of parking. How likely are you to purchase valet parking?

Not likely

Likely (At what price would you likely purchase this service? \_\_\_\_\_)

Very likely

9. Suppose the Zoo hosted a two-day weekend event called ZooFriend Days. This would be for people who are already part or would like to become part of a conservation organization. ZooFriend Days would involve special educational lectures or workshops, small group tours and lunch would be provided. Would you pay \$100 to attend this event, which also includes parking and price of Zoo admission?

Yes

No (At what price would you attend? \_\_\_\_\_)

I would never attend this event for other reasons.



10. Which of the following events are you or your child likely to attend or participate in? Rank options from most likely to least likely (1 being most likely, 4 being least likely)

\_\_\_ Zoo Run: A walk/run race through or partially through the zoo.

\_\_\_ Craft and Art Fair at the Zoo: An event that includes selling handmade items and artwork from local people and businesses in mid-March

\_\_\_ The Chinese Lantern Festival: An annual event that takes place after Chinese New Year, usually in February or March depending on the lunar calendar. The Lantern Festival is used to celebrate the coming of spring: in China, Hong Kong, South Korea, and Taiwan, the holiday is celebrated by hanging lanterns and creating life-sized illuminated sculptures. This festival attracts many people who come to see the lit-up artwork, especially in the darkness of winter.

\_\_\_ Bring in the Spring: two events that occur in late March, coinciding with the opening of Butterfly Kaleidoscope: a traveling dinner tour and an exclusive luncheon. The traveling dinner tour gives couples a unique date experience, and the exclusive luncheon brings gardeners and landscapers together to learn about nature, horticulture, birds, and butterflies. Both include live music, local celebrities and food.

\_\_\_ None

11. What is a fair price to participate in your top choice in the previous question?

## Appendix 4

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12. Would any of the following activities likely increase your visits to the Zoo either because of your interest or your child(ren)'s? Rank options from most likely to least likely (1, being most likely)

A rock climbing wall

A ropes course

Programs, exhibits, or events geared toward children 0-4

Preschool

Winter or Fall Behind the Scenes Tours: guests can sign up for a 45 minute Behind the Scenes tour when they get to the zoo that offers them a 20 minute educational chat, a chance to observe the animal(s), and in some cases the opportunity to pet or feed animals in off-exhibit spaces.

Tour of Veterinary Hospital: Weekly 60 minute guided tour where participants can examine and analyze real animal records, hear stories about the difficulties associated with transporting animals, see x-rays designed to assist in the understanding of animal anatomy, practice blowing a (dulled and corked) medical dart out of veterinary blowgun and watch veterinarians complete a live (or recorded) surgical procedure on a monitor.

Senior Days: A monthly event extended to those in the community who are senior citizens (65 and older) or those who are grandparents, where special admission pricing is offered. This would be alongside special activities designed for the guests on this day, in addition to season-specific attractions during this monthly event.

ZooPerts: A monthly lecture series that would feature local, Indiana-based breweries and wineries; ideally a different brewery or winery would be represented each month. Lectures would entail a scientist, veterinarian, or Zoo trainer discussing problems facing an animal at the Zoo, species at large, or Zoo operations in general.

None

13. What is a fair price to participate in your top choice in the previous question?

14. Do you have children under the age of 18 who live at home with you at least part of the time?

Yes

No [GO TO Q17]

[IFYES] what are their ages? (Check all that apply)

0-2

3-5

6-8

9-10

11-12

13-15

16-17

[SKIP Q16 IF RESPONDENT DOES NOT HAVE ANY CHILDREN, AGES 13-17]

15. Would you pay \$200 for your child to participate in a hypothetical program called The Zookeeper Guide? The Zookeeper Guide is a program for students ages 13-17 that will expose them to what it takes to care for certain animals. One day per week for 10 weeks (during the school year and summer months), teens will take classes on conservation, engage in animal caretaking, volunteer in areas of interest, and get information on how to pursue related careers. When they are finished with the program, they will have the opportunity to become a volunteer tour guide and will be able to interact with zoo visitors about the animals and topics related to conservation.

Yes

No (At what price would you attend?)

I would never attend this event for other reasons.

16. Would you pay \$30 (per child) to drop off your child (ages 2-13) at the Zoo for 4.5 hours of entertainment on a Friday or Saturday night? Supervision would be provided and the activities would be orientated toward increasing the children's knowledge of animals, the zoo and conservation.

Yes

No (At what price would you attend?)

I would never attend this event for other reasons.

## Appendix 4

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17. What is your age?

18-25

26-34

35-44

45-54

55-64

65-74

75+

18. What is your race or ethnicity? Please select all that apply.

African American/Black

Asian

Hispanic/Latino/Latina

Native Hawaiian or other Pacific Islander

American Indian or Alaska Native

White

Prefer not to answer

19. Do you identify as male, female, transgender or gender non-conforming?

Male

Female

Transgender

Gender non-conforming

Prefer not to answer

20. What zip code do you live in?

Enter zip code

Out of state

State (enter state):

21. What is the highest level of education that you have obtained?

High school diploma or equivalent (GED)

Associate degree (junior college)

Bachelor's degree

Master's degree

Doctorate

Professional (JD, MD, DDS etc.)

None of the above (less than high school)



# SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS

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