

Report to the Hamilton County Tax Levy Review Committee

Performance Review of the Cincinnati Zoo and Botanical Garden

Final Report
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Table of Contents

	Page
I. Overview of Engagement	1
II. Executive Summary (Overview of Major Observations)	2
III. Recent History and Overview of CZ&BG's Operations	5
IV. Corporate Structure	7
V. Organizational Structure	9
VI. Financial Analysis	11
• Review of Past Financial Statements and Analysis of Trends	
• Balance Sheet Analysis	
• Short-term Financial Strength	
• Long-term Financial Strength	
• Capital Additions	
• Capital Replacement Needs	
• Review of Maintenance Expenditures	
• Bank and Bond Debt Analysis	
• Notes and Bonds Payable	
• Operating Results and Change in Net Assets	
• Operating Revenues and Attendance	
• Analysis of Past and Present Sources of Funding (Gifts, Grants, and Donations)	
• Alternative Sources of Funding Utilized Before Tax Levy Funds	
• Endowment Fund Activity	
• Investment Income	
• Review of Past CZ&BG Tax Levy Information	
• Operating Expenses	
• Review of Expenses by Department	
• Interest and Depreciation	
• Five-year Revenue and Expenditure Forecast for the Upcoming Levy Period	
VII. Operations Analysis	51
• Effectiveness of Strategic Planning	
• Review of Past Accreditation Reviews and CZ&BG Responses	
• Review of Insurance Coverage	
• Review of Major Contracts	
• Review of Farm Operations	
• Cash Management Policies and Procedures	
VIII. Benchmarking Analysis	69

Table of Contents, continued

	Page
IX. Possible Threats to CZ&BG During the Next Tax Levy Period	84
X. Summary Findings	85
XI. Recommendations	88
XII. Appendices:	90
<ul style="list-style-type: none">• Appendix A: A Summary of Audited Financial Statements• Appendix B: CZ&BG's Response to 2013 HW&Co. Report• Appendix C: CZ&BG Levy Renewal• Appendix D: Strategic Plan Document• Appendix E: Tax Levy Flyer	

Exhibits

Exhibit Number		Page
1	Short-Term Financial Strength Analysis	12
2	Long-Term Financial Strength Analysis	13
3	Property and Equipment Analysis	14
4	Capital Expenditures & Major Maintenance Five-Year History 2013-2017	14
5	Ten-Year Forecast of Capital Replacement Needs for Buildings and Exhibits in Place	18
6	Maintenance and Repair Expense - Budget vs. Actual	19
7	Projects Approved for 2018	20
8	CZ&BG Bond and Note Debt Amortization Schedule	21
9	Operating Income (Loss) Analysis	23
10	Direct Operating Income (Loss) Analysis by Department	24
11	Direct Operating Income (Loss) Analysis by Admission	26
12	Attendance Analysis	27
13	Operating Revenue Analysis	28
14	Park Operating Revenue Per Admission	29
15	Revenue Variance Analysis	30
16	Funding Source Trends	31
17	Gifts, Grants and Donations 2014-2012 Totals and Averages	32
18	Gifts, Grants and Donations Analysis	33
19	Endowment Fund Summary of Activity	35
20	Endowment Fund Summary of Restricted vs. Unrestricted Fund Balances	36
21	Investment Income Analysis	36
22	Tax Levy Funding Analysis	37
23	Tax Levy Revenue Per Admission	37
24	Salaries and Wages Expense Analysis	38
25	Salary and Wage Expense	39
26	Full-Time Employee Count	40
27	Salaries and Wages Expense Analysis - Cost Per FTE	41
28	Salaries and Wages Per Admission	41
29	Animal Care and Health Expense Analysis	42
30	Horticulture Expense Analysis	43
31	Membership and Park Operation Expense Analysis	43
32	Facilities and External Properties Expenses Analysis	43
33	Warren and Clermont County Financials	44
34	General and Administrative Expense Analysis	44
35	Events and Group Functions Expense Analysis	45
36	Education Expense Analysis	45
37	Crew Expense Analysis	45
38	Fundraising Expense Analysis	46
39	Interest Expense by Operating Category Analysis	47
40	Depreciation by Operating Category	47
41	Scenario 1- Zero Levy Increase	48
42	Scenario 2- Five Years of Inflation, 2014 Base	49
43	Scenario 3- Ten Years of Inflation, 2009 Base	50
44	Qualifying Area Expenditures Paid by Levy vs. Internally Funded	59

Exhibits, continued

Exhibit Number		Page
45	Contract Analysis--The Concessionaire Agreement	61
46	Contract Analysis--The Concessionaire Agreement: Annual Guarantee	61
47	CZ&BG Purchases Solar Array Pre-contract Cash Flow Analysis Assuming Purchase in 2018 (Year 8)	65
48	Benchmarking - Peer Group Analysis	72
49	Benchmarking Analysis-Cincinnati Area Attractions	73
50	Five-Year Attendance History 2013-2017	74
51	CZ&BG Direct Operating Revenues per Admission vs. Consumer Price Index	75
52	CZ&BG Direct Operating Revenues per Admission vs. Consumer Price Index	75
53	Direct Operating Revenues vs. Direct Operating Expenses Cumulative Percentage Change Analysis 2014-2017	76
54	Cumulative Change in Direct Operating Revenues vs. Cumulative Change in Direct Operating Expenses Calendar Years 2013-2017	77
55	Net Operating Revenue and Expense per Attendee	78
56	Net Operating Income per Admission vs. Total Attendance Cumulative Percentage Change Calendar Years 2013-2017	79
57	CZ&BG Executive Compensation Analysis	81
58	Annual Levy Support for Ohio Zoos Comparison Analysis	83

I. Overview of Engagement

We have been engaged to conduct a performance review of the Cincinnati Zoo and Botanical Garden, collectively referred to throughout our report as "CZ&BG." The objectives of this report as outlined in the Consulting and Services Agreement between the Board of County Commissioners, Hamilton County, Ohio and Howard, Wershbale and Co. (HW&Co.) are as follows:

- Analysis of the CZ&BG's compliance with its current contract with Hamilton County
- Evaluation of current operating efficiency
- Review of comparative data from other zoos and attractions in the region
- Recommendations for Tax Levy contract provisions between Hamilton County and the CZ&BG, assuming successful passage of the proposed Tax Levy
- Recommendations for costs savings and/or revenue enhancements

For financial reporting purposes, the CZ&BG financial statements are combined with the Cincinnati Zoo Foundation (the "Foundation"). The financial reporting is combined because the CZ&BG can exert control over the Foundation through the selection of trustees. Our analysis addresses both the CZ&BG and the Foundation.

We were not engaged to and did not conduct an audit of any of the information in this report. Accordingly, we do not express an opinion on the accuracy of the information contained in this report. If we had performed additional procedures, other matters might have come to our attention.

We would like to thank the scores of individual staff members and leadership personnel who took the time to answer our questions during the research stage of the report. In particular, we would like to mention Lori Voss. Without her gracious and helpful cooperation, our findings would have been less conclusive and would not provide the talking points so necessary for serious consideration of the Tax Levy proposal.

We appreciate the opportunity to be of service to the Hamilton County Tax Levy Review Committee for the Performance Review of The Cincinnati Zoo and Botanical Garden.

HW&Co.

A handwritten signature in black ink, appearing to read "HW&Co.", with a period at the end.

II. Executive Summary (Overview of Major Observations)

Zoos across the country are experiencing record attendance and Hamilton County's CZ&BG is no exception. The CZ&BG experienced a major increase back in 2009 when attendance jumped by 240,000 visitors to over 1.2 million, exceeding one million in gate attendance for the first time in the CZ&BG's long history. At the time, many attributed the increase to the recession; however we can now clearly see that 2009 was just the beginning and much more was driving the surge in popularity. Major changes to the Park's entrance and parking facilities were strategically managed and well-timed. Major new exhibits were just beginning to come on line and have continued to come on line. At the same time the CZ&BG is deploying social media in effective and creative ways that we believe maximize interest and attendance. The momentum that started in 2009 has carried forward to our current performance review which is focused on the CZ&BG's 2013 through 2017 fiscal years. For 2013, the CZ&BG achieved attendance of 1.4 million and has continued to grow reaching a record attendance of 1.6 million for fiscal year 2017. While this is an undeniable success story, there are strong indications that the CZ&BG's current 2018 fiscal year will exceed 1.8 million when it ends on March 30, 2018.

Our benchmarking analysis indicates that the CZ&BG has earned an excellent reputation on a local, regional, and national basis. The CZ&BG was ranked in the Top Ten on three of the six "Top Ten U.S. Zoos" websites that we reviewed. The CZ&BG also receives good reviews in parenting and children's websites and publications. In Ohio, attendance at the CZ&BG is second only to that of the Columbus Zoo, and exceeds rates at regional zoos in Indianapolis and Louisville. The admission price at the CZ&BG is favorable with that of comparable zoos, while its operating costs compare favorably to other Ohio zoos both in total and on a per admission basis. The CZ&BG's management compensation also correlates with other Ohio and regional zoos. Furthermore, the CZ&BG admission price appears to be quite reasonable and competitive when compared to prices for other regional entertainment attractions. The CZ&BG has attained these successes while receiving lower percentage amounts of public support than do its peers in Columbus, Toledo and Akron. (Because it is part of a larger metro park system, public support amounts specific to the Cleveland Metro Parks Zoo are not available and it was not included in the public support analysis).

The increase in daily attendance mentioned above, along with other factors such as an intensified focus on memberships (including higher level memberships), enhanced attractions, programming, increased sponsorships and designated gifts has resulted in a \$6.6 million increase in annual direct operating revenues between 2013 and 2017. Over the same period, annual operating expenses have increased by only \$3.8 million, a significantly lower number than the corresponding revenue increase. While still dependent on Hamilton County for funding, the CZ&BG is currently self funding a higher percentage of its direct operating expenses than at the beginning of the current review period.

While recent operating results are encouraging, we are concerned that attendance at the CZ&BG may be approaching maximum capacity. The CZ&BG is land locked with only 81 usable acres, and less than 2,500 parking spaces. This is a concern because the CZ&BG's recent increases in direct operating revenues are primarily due to attendance growth, not increases in revenues per admission, which have only increased by 2% per year. Operating expenses on the other hand, which are primarily fixed costs, are projected to grow by 3% (or more) per year.

The CZ&BG should be commended for the strategic actions put into place over the last ten years that are directly impacting the improved financial results. For example, the final phases of the \$30 million Africa Savannah project came on line during the current levy cycle, however utility costs have, in fact, decreased. The utility savings is due in large part to a 400,000-gallon underground detention tank located under the exhibits that collects rainwater that is filtered and used to feed the streams, waterfalls and tanks in both new and existing Zoo exhibits.

The increase in operating costs may appear justifiable in light of the even greater increased operating revenues, however we believe the increase in costs is still a major area of concern. While many factors contributed to increase in costs, they are overshadowed by the fact that the annual cost of wages and benefits increased by \$3.8 million from 2013 to 2017.

From 2013 to 2017, the CZ&BG has benefited not only from increases in operating revenues tied to attendance but also from unrestricted gifts, fundraising and sponsorships. These latter sources of funding played an important role in the CZ&BG's overall positive operating results during this period.

These positive results make it more challenging to confront the risks inherent in a situation in which direct operating expenses are increasing at the same time the CZ&BG's infrastructure reinvestment and replacement needs are also growing at a potentially unsustainable pace. While direct operating revenues are largely driven by attendance, which can vary significantly from year-to-year and can change due to outside factors, a large percentage of the CZ&BG's expenses are fixed, and, therefore, must be met whether attendance is up or down.

This concern is accentuated by the fact that the fixed expenses of the CZ&BG are on an upward path. At the beginning of the current levy period, the CZ&BG was at the late stages of a \$50 million capital expansion that concluded in early 2017 with the completion of Hippo Cove, the last phase in a series of "Africa" exhibits. In the fall of 2016, a \$12 million expansion of Gorilla World was started and is expected to be finished in December 2017. It is good news that all of the expansions have been paid for in large part by private support, not by levy funds. However expansion brings along with it increases in future operating expenses and future capital reinvestment that should be incorporated into the CZ&BG's strategic plan.

Management's current operating budget includes reoccurring maintenance expenses in excess of \$1.4 million that includes regularly scheduled maintenance for electrical, plumbing, painting, HVAC, aquatics, roofs, exteriors, roads, bridges and walkways. Ten years ago, the CZ&BG budget was less than a third of this amount. In addition, Management has recently begun budgeting \$2.5 million to fund "reinvestment" to keep up with the capital asset replacement needs of the CZ&BG. The budget, which is subject to availability of funds, covers both forecasted capital asset replacement as well as needs that arise due to "increased animal care standards".

As the current expansion of the CZ&BG comes to a conclusion, we believe a long-term plan for the funding of future capital reinvestment should be put into place and should take precedence over future expansion.

During our review of the financial strength of the CZ&BG, we noted a modest upward trend in unrestricted working capital available to the CZ&BG as a positive development. We also found the overall long-term financial strength of the CZ&BG has improved between 2013 and 2017. We believe these positive developments are the result of Management using operating surpluses to build working capital and to pay down long-term debt.

The Cincinnati Zoo Foundation (the "Foundation") has control over unrestricted, restricted and board-designated endowment funds that are in place for the long-term benefit of the CZ&BG. From 2014 through 2017, the Foundation provided the CZ&BG with \$3 million for the completion of the "Africa" exhibits and \$2 million for property acquisitions. These expenditures contributed to a \$4.2 million reduction in board-designated endowment funds. In our opinion, the use of endowment funds to fund expansion goes against what we believe is prudent, and may make the CZ&BG more dependent on levy funding.

Our review of the corporate structure of the CZ&BG leads us to recommend that the Foundation be developed into an entity that operates more independently than is currently the case. Providing the Zoological Society with financial support in the form of increased endowment funds is a primary mission of the Foundation. To succeed in this mission however, the Foundation should be allowed more control over the ultimate destination of incoming unrestricted funds and over the timing of its disbursement. Making the Foundation's independence from the Zoological Society a priority at the CZ&BG, could result in a stronger endowment and a keener long-term focus for the CZ&BG overall.

Our analysis of its Agreement with Hamilton County indicates that the CZ&BG is in compliance with the terms and conditions. From 2013 to 2017, the total amount of qualifying expenses increased by \$1.2 million, however the increases were funded by positive CZ&BG operating results. The positive net result was that in 2013, the CZ&BG internally funded 52.2% of all qualifying expenses, and by 2017, 57.2% of all qualifying expenses were self funded. This exceeds the 30% that the contract currently requires the CZ&BG to self fund. It is worth pointing out, though, that the Agreement's current provisions do not include clear or specific goals to reduce future reliance on levy funds. Later in this report, we include specific recommendations regarding potential changes to the present Agreement provisions to be considered for the CZ&BG's next Tax Levy contract.

The CZ&BG's strategic plans are focused primarily on growth, animal excellence, zoo accessibility and conservation, all worthwhile and important areas. However, they lack a strategic long-term financial component to address the following areas that we believe pose considerable risk and uncertainty:

- Risk that future attendance will eventually become flat or decrease as the excitement associated with recent new exhibits fades or the park reaches maximum capacity.
- Risk that future revenue increases will not be able to keep pace with escalating fixed costs.
- Risk that future expansion will increase fixed expenses to an unsustainable level. We believe there is a direct correlation between expansion and increased fixed costs.
- Risk that operations will not be able to fund the capital reinvestment needed to keep the CZ&BG's existing and aging infrastructure operating in light of both the age and complexity of the existing park, as well as increasing animal care standards.
- Risk that the current endowment fund is not large enough nor independently stable enough to act as a safety net for the CZ&BG in light of the recent expansion and increased fixed operating costs.

Finally, through the preparation of forecasts, we address the question, "Can the CZ&BG meet the community need without ongoing increases in the Tax Levy"? When we focus on recent historical results, the answer appears clear, the CZ&BG has become less dependent on Levy funding and therefore, a Levy increase is not warranted. While the CZ&BG has become less dependent on the Levy, they have also become more reliant on the recent phenomenon of increasing attendance and the additional revenues that come with it. Our analysis indicates that, if attendance stabilizes at 1.6 million visitors as forecasted, and the current levy is renewed without an increase, the CZ&BG's operating cash flow may remain positive but could decrease below the level required to afford the CZ&BG the ability to self-fund capital reinvestment. Increasing the Levy for inflation could mediate this result and partially or fully restore the CZ&BG's ability to self-fund capital reinvestment, depending on the level of inflation applied. It should be noted, that while not forecasted, a meaningful pull-back in attendance, even to levels last seen as recently as 2015, may cause operating cash flows to turn negative.

III. Recent History and Overview of CZ&BG's Operations

Our current review begins with the fiscal year ending March 30, 2013, at a time when the CZ&BG was experiencing historically good attendance with 1.4 million annual visitors. It was also a time when Phase III of “Africa”, the largest animal exhibit in the CZ&BG’s history was being completed.

Phase III, which opened during the summer of 2013, included a wider vista, offering visitors a new opportunity to see African lions and cheetahs. Overlooking Phase III, the Base Camp Café also opened in 2013, featuring both indoor and outdoor dining.

Africa Exhibit



Africa Exhibit – Giraffe Ridge



Phase IV was completed in 2014 and included the presentation of zebra, gazelles and some of Africa's most beautiful birds to the Savannah portion of the Africa exhibit, as well as Painted Dog Valley, which features the African painted dog.

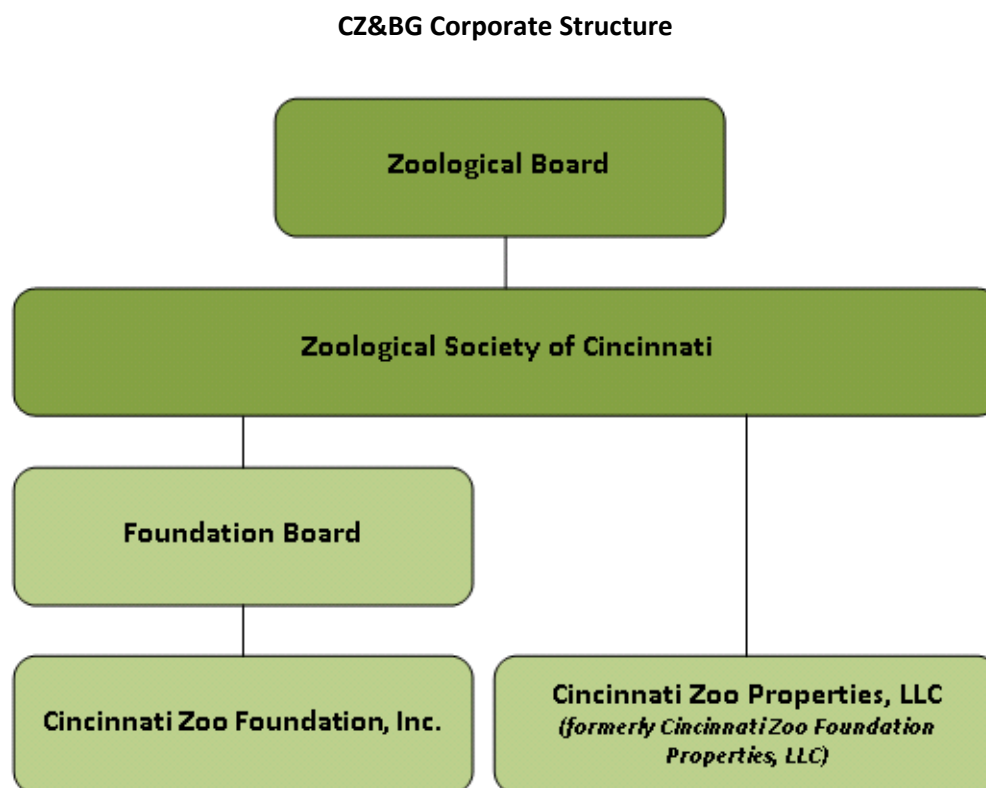
2016 brought the completion of Hippo Cove, which features an underwater viewing area and a scenic overlook where visitors can admire the full girth of Nile hippos in a crystal clear 70,000-gallon exhibit pool. This led to the January 2017 birth of social media star, Fiona the Hippo, who is currently the largest draw to the CZ&BG, bringing people from all over the world to Cincinnati.

Africa Exhibit – Hippo Cove



Currently under construction and scheduled to open on December 5, 2017, Gorilla World a major expansion of a current exhibit will include a greenhouse structure, which will essentially double the size of the current exhibit and provide multiple gorilla family groups with access to naturalistic settings, natural daylight, and large interactive spaces, promoting healthy interaction among family members. This expansion will add four to five months of gorilla viewing opportunities to CZ&BG's visitors. Gorilla World will also include cutting-edge holding facilities that will modernize and greatly improve the off-exhibit holding and living areas for the Zoo's gorillas.

IV. Corporate Structure



Beginning July 1, 1957, the Zoological Society of Cincinnati (the "Society") entered into a series of contracts with the City of Cincinnati, under which it agreed to operate and maintain all of the real and personal property of the City known as The Cincinnati Zoo and Botanical Gardens. The contract expires December 31, 2061. The Society is committed to the understanding and preservation of wildlife and our living world through naturalistic exhibits of animals and plants, scientific research, education, and active cooperation with a worldwide network of conservation organizations.

In 2000, the Zoo General Operating Endowment Trust Fund was transferred from the Society to the Cincinnati Zoo Foundation, Inc. (the "Foundation"). The purpose of the Foundation is to perform fundraising functions and provide financial support for the benefit of the Society. All funds held by the Foundation are for the benefit of the Society. The Society can exert control over the Foundation through the selection of Foundation trustees. The extent of the control is such that for audit purposes the Foundation is consolidated into the financial statements of the Society.

In 2005, the Cincinnati Zoo Foundation Properties LLC (the "Properties LLC") was set up as an arm of the Foundation. The purpose of the Properties LLC is to buy, sell, and hold the real property of the Foundation. During 2011, ownership of Properties LLC was transferred from the Foundation to the Society and renamed as Cincinnati Zoo Properties, LLC. During the current levy period, both entities made minor amendments and restatements to their respective Codes of Regulations.

The Articles of Incorporation and the Code of Regulations of the Society and the Foundation were reviewed and appear to be in order and adequate for the effective corporation governance of these two entities.

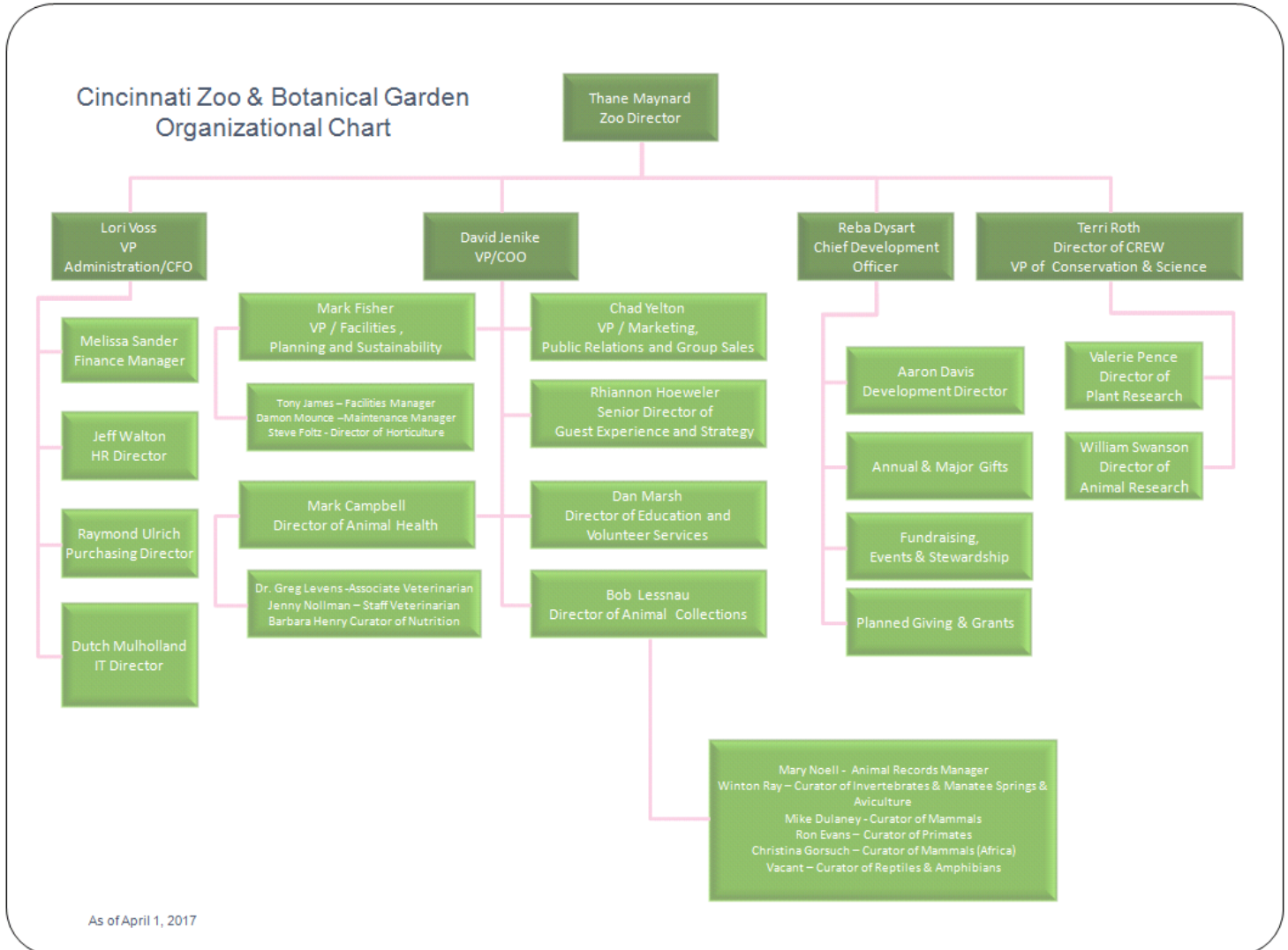
The current organization structure allows the Society and Foundation to function as one entity, which appears to streamline the decision-making process regarding the use of Foundation funds. This structure does not allot significant decision-making responsibility to the Foundation Board but instead provides the Society Board with control. One of the Foundation Board's primary missions is to provide the Society with financial support in the form of increased endowment funds; however, to effectively succeed at this mission, the Foundation Board would need a stronger voice in determining the direction of incoming unrestricted funds and timing of their disbursement. We believe a more independently functioning Foundation could be beneficial to the CZ&BG. For example, Board-designated funds could be established within the Foundation to fund future major maintenance projects and debt retirement.

Summary Finding

One of the Foundation Board's primary missions is to provide the Society with financial support in the form of increased endowment funds. However, to effectively succeed at this mission, the Foundation Board would need a voice in determining the direction of incoming unrestricted funds and the timing of their disbursement.

V. Organizational Structure

The CZ&BG's current structure reflects a thoughtfully planned layout of roles, responsibilities, and reasonable hierarchies. Lines of reporting in the organizational chart are logical and would appear to promote operational efficiencies. The following represents the CZ&BG's current organizational structure:



Our topical review of the Board Committee structure concludes that it is logical and appears to effectively support the mission and the corporate governance needs of the CZ&BG. The memberships of the Board committees appear to be appropriate. The Audit Committee is composed of independent parties with the Vice President of Administration & CFO, Lori Voss, acting as a non-voting staff, and the Executive Committee Chair, Craig Maier, acting as an Ex Officio member.

Accountability and Transparency

According to the two leading nonprofit rating agencies, Charity Navigator and Guide Star, the CZ&BG has earned high marks for both accountability and financial performance.

Charity Navigator gives the CZ&BG four stars out of four “Overall” and for its “Financial” Performance. Relative to “Accountability and Transparency”, the CZ&BG received three stars. It rated the CZ&BG’s “Financial Performance Metrics” “very high,” meaning that it was impressed by the CZ&BG’s low administrative and fundraising costs, and its strong program efficiencies. The CZ&BG received Charity Navigator’s “Check Marks” for all of their metrics except the “Accountability and Transparency Performance Metrics” relative to easy accessibility to the “Donor Privacy Policy”, “Audited Financials,” and the “Form 990”. Building links to these three metrics on CZ&BG’s website would likely yield even higher ratings from Charity Navigator.

Guide Star gives the CZ&BG the following “Check Marks”:

- Guide Star Seal: Committed to transparency
- Registered with IRS: Legitimacy information is available
- Financial Data: Annual Revenue and Expense data reported
- Forms 990: 2016, 2015, 2014, 2013, and 2012 Forms filed with the IRS
- Mission Objectives: Mission Statement is available
- Impact Summary: Impact Summary for the nonprofit is available

Summary Findings

The CZ&BG is performing well with respect to the corporate governance goals of an appropriate organizational structure, an efficient committee structure, and a high level of both accountability and transparency.

The CZ&BG should consider offering easy accessibility to its Donor Privacy Policy, audited financial statements and Forms 990 on the CZ&BG website. The CZ&BG should notify Charity Navigator of this change, and its Accounting and Transparency should rise to four stars and the overall rating should also improve.

VI. Financial Analysis

Review of Past Financial Statements and Analysis of Trends

Our financial analysis of the CZ&BG is based on our review of historical audited financial statements and internal trial balance and general ledger data provided by management. A summary of the 2013-2017 balance sheet and operating results is included in Appendix A. We have focused on five years of data covering years ended 2013-2017. March 31, 2017 is the most recent audited year available.

For financial reporting purposes, the CZ&BG financial statements are combined with the Cincinnati Zoo Foundation (the "Foundation"). The financial reporting is combined because the CZ&BG can exert control over the Foundation through the selection of trustees. Our analysis addresses both the CZ&BG and the Foundation.

We began with an analysis of the historical and current financial strength of the CZ&BG by analyzing the make up of the balance sheet. We then reviewed historical capital expenditures and how they have been funded as well as the status of current and future capital projects.

Our operating results analysis segregates direct earned revenues and direct expenses (which correlate with attendance, animal care, and park operations) from other sources of funds such as levy support, gifts, grants, and donations and from other expenditures such as those for fundraising, capital projects, and major maintenance.

The CZ&BG receives gifts, grants, and donations that are either restricted by the donor for a specific use or are unrestricted and therefore to be spent or invested at the discretion of the CZ&BG Board. We have prepared an analysis of the historical volume of these funds and how the funds have been used. Finally, the usage and overall impact of historical levy funding provided by Hamilton County has been quantified in our analysis.

Balance Sheet Analysis

A summary of the CZ&BG's audited 2013-2017 balance sheets are presented in Appendix A. The data from the following financial strength, capital additions, capital budgets, and debt analysis was derived from the 2013-2017 audited statements supplemented by additional information provided by CZ&BG management.

Short-term Financial Strength

We measured the short-term financial strength of the CZ&BG by calculating unrestricted working capital for 2013-2017, defined as restricted and unrestricted current assets less current liabilities, pledges, and funds related to capital improvements and donor-restricted endowment funds. The measurement includes the assets and liabilities of the CZ&BG and the Endowment Fund, and as such, is reflection of their combined short-term strength. As a general rule, every entity, whether private or public, must maintain sufficient working capital to meet its current obligations and to remain a viable going concern.

Exhibit 1

Short Term Financial Strength Analysis					
	3/31/2013	3/31/2014	3/31/2015	3/31/2016	3/31/2017
Current Assets					
Cash and cash equivalents	\$ 1,529,494	\$ 1,493,979	\$ 3,732,741	\$ 4,419,813	\$ 3,946,413
Trade and other receivables	2,821,893	2,283,326	1,286,962	1,393,099	1,086,288
Pledges receivable in less than one year	1,537,716	1,916,601	1,841,883	1,919,768	3,534,256
Prepaid expenses and supplies	244,589	781,915	317,757	301,115	339,374
Investments - Zoo Society	4,531,342	9,162,785	9,395,014	1,697,685	4,728,353
Investments - Endowment Fund	18,154,504	19,427,600	16,804,909	15,081,851	14,886,214
Restricted and unrestricted current assets	28,819,538	35,066,206	33,379,266	24,813,331	28,520,898
Current Liabilities					
Accounts payable	2,737,834	4,063,713	2,493,431	2,391,377	2,901,324
Accrued expenses	2,857,891	2,562,267	2,713,721	2,490,335	2,419,475
Line of credit	4,500,000	4,000,000	-	-	-
Notes Payable - current	1,123,000	610,000	360,000	805,000	1,200,000
Bond Payable - current	685,000	690,000	695,000	700,000	710,000
Current liabilities	11,903,725	11,925,980	6,262,152	6,386,712	7,230,799
Current assets less current liabilities	16,915,813	23,140,226	27,117,114	18,426,619	21,290,099
Less: Pledges for capital improvements	(1,537,716)	(1,916,601)	(1,841,883)	(1,919,768)	(3,534,256)
Less: Zoo Society investments restricted for capital	(3,678,024)	(8,559,861)	(8,822,196)	(1,177,492)	(4,148,265)
Less: Donor restricted endowment fund investments	(9,223,868)	(9,937,882)	(10,146,054)	(9,833,698)	(10,159,111)
Plus: Capital purchases in accounts payable	1,007,459	1,919,688	880,638	1,357,789	1,226,709
Unrestricted working capital	\$ 3,483,664	\$ 4,645,570	\$ 7,187,619	\$ 6,853,450	\$ 4,675,176

As the chart above reveals, unrestricted working capital increased during the review period by \$1.2 million. Unrestricted working capital peaked in 2015 before decreasing during 2016 and 2017. During the period 2013 to 2015, unrestricted working capital increased by \$3.7 million with the largest increase occurring during 2015 as a result of debt refinancing. In 2015, CZ&BG used \$3.0 million to complete funding of the Africa exhibit and in each of the following two years, used \$1.0 million of unrestricted endowment funds to purchase properties resulting in a decrease of current assets and working capital. It appears that the CZ&BG has sufficient working capital to meet its current obligations.

Summary Finding

From 2013 to 2017, unrestricted working capital has moderately increased as a result of operating income surplus. If CZ&BG had not used \$2.0 million of unrestricted endowment funds, \$1.0 million in 2016 and \$1.0 million in 2017, for property acquisitions, the unrestricted working capital would be even stronger. Management has indicated the use of funds for property acquisitions was part of a long term plan and not a recurring transaction. It appears the CZ&BG has adequate current assets to meet CZ&BG's current obligations and contribute to long-term sustainability.

Long-term Financial Strength

We measured the long-term financial strength of the CZ&BG by first adding together unrestricted working capital and long-term assets from which capital-related items had been excluded. We then subtracted long-term liabilities from this total. While the short-term analysis above focused on working capital and the CZ&BG's ability to meet current obligations, the long-term financial strength analysis focuses on the entity's ability to grow long-term (noncapital) assets as well as to reduce its reliance on long-term debt.

Exhibit 2

Long-Term Financial Strength Analysis					
	<u>3/31/2013</u>	<u>3/31/2014</u>	<u>3/31/2015</u>	<u>3/31/2016</u>	<u>3/31/2017</u>
Unrestricted working capital	3,483,664	4,645,570	7,187,619	6,853,450	4,675,176
Long-term restricted assets:					
Donor restricted endowment fund investments	9,223,868	9,937,882	10,146,054	9,833,698	10,159,111
Beneficial interest in trusts	3,458,316	3,557,130	3,532,727	3,142,784	3,218,704
Bond indenture deposits and costs	2,032,824	2,046,476	2,066,987	2,088,761	2,112,938
Long-term restricted assets	14,715,008	15,541,488	15,745,768	15,065,243	15,490,753
Assets with capital related items excluded	18,198,672	20,187,058	22,933,387	21,918,693	20,165,929
Long-term liabilities:					
Notes payable - long-term	1,775,000	7,165,000	11,305,000	6,550,000	4,000,000
Less: Notes used for capital, repaid with pledges		(6,000,000)	(6,000,000)	(4,300,000)	(3,200,000)
Bonds payable - long-term	6,331,904	5,639,361	4,936,817	4,324,273	3,462,181
Pooled income liability	36,415	33,112	27,469	27,010	26,524
Gift annuity obligations	241,391	260,012	165,240	115,919	113,014
Agent liabilities	506,232	1,049,061	1,008,303	1,214,724	894,031
Long-term Liabilities	8,890,942	8,146,546	11,442,829	7,931,926	5,295,750
Total Net Assets with capital related items excluded	\$ 9,307,730	\$ 12,040,512	\$ 11,490,558	\$ 13,986,767	\$ 14,870,179

The analysis displayed in the chart above shows that between 2013 and 2017, net assets with capital related items excluded increased by \$5.6 million. From 2015 to 2017, net assets with capital-related items excluded increased by \$3.4 million as a result of the use of operating funds for the repayment of long-term debts. Debt related to capital projects are paid with funds for capital projects, i.e. restricted dollars while non-capital debt is paid with surplus cash from operations. This is an indication the overall long-term financial strength of the CZ&BG is improving and the capital expansion over this period was not funded by long-term debt.

Summary Finding

The overall long-term financial strength of the CZ&BG has improved between 2013 and 2017. During this period, net assets with capital-related items excluded, increased by \$2.4 million, an indication the recent trend in overall long-term financial health is a favorable one.

Capital Additions

The CZ&BG's considerable expansion in both buildings and in outdoor displays over the last five years is quantified in the Exhibits below.

Exhibit 3

Property and Equipment Analysis						
As of March 31;	2012	2013	2014	2015	2016	2017
Land	13,163,022	\$ 13,163,022	\$ 14,086,048	\$ 15,349,020	\$ 19,776,310	\$ 21,940,520
Buildings and outdoor displays	115,042,201	128,711,600	129,860,761	151,781,015	149,884,255	160,358,014
Equipment and tools	6,570,665	6,721,762	7,296,621	7,462,088	8,025,750	8,148,418
Furniture and fixtures	1,306,352	1,394,760	2,430,904	2,593,667	2,728,873	2,742,135
Capital Leases	1,055,146	929,498	-	-	-	-
Construction-in-progress	13,334,969	10,373,348	15,783,390	404,233	7,479,734	3,950,291
Property and Equipment at Cost	150,472,355	161,293,990	169,457,724	177,590,023	187,894,922	197,139,378
Less accumulated depreciation	(75,813,155)	(80,349,591)	(85,472,183)	(91,262,987)	(97,330,740)	(103,562,716)
Property and Equipment, net	\$74,659,200	\$80,944,399	\$83,985,541	\$86,327,036	\$90,564,182	\$ 93,576,662

Totals for both Property and Equipment at Cost and for amounts adjusted for accumulated depreciation were significant over the period studied. Property and Equipment at Cost grew by \$46.7 million, while Property and Equipment net of accumulated depreciation grew by \$18.9 million.

Details on the CZ&BG's capital additions are presented in the Exhibit below.

Exhibit 4

Capital Expenditures						
Five Year History 2013 - 2017						
	2013	2014	2015	2016	2017	Total 2013 - 2017
Africa Phase 2 & 3	\$ 8,739,621	\$ 1,409,738				\$ 10,149,359
Africa Phase 4 - Savannah		3,973,653	2,454,816			6,428,469
Africa Phase 5 - Hippo		49,596	354,637	6,636,773	710,548	7,751,555
Sub Total Africa	8,739,621	5,432,987	2,809,453	6,636,773	710,548	24,329,383
Houses/Land	67,681	987,654	\$ 3,955,227	\$ 1,149,561	\$ 2,164,210	8,324,332
Gorilla World				132,180	4,434,415	4,566,595
Buildings & Outdoor Displays	618,778	730,958	603,726	484,696	32,525	2,470,684
Equipment & Tools	25,449	574,859	235,339	664,670	122,668	1,622,985
Parking - Surface Property		302,247	89,775	122,339	1,077,645	1,592,006
Cat Canyon	1,081,217					1,081,217
Technology Cabling		1,088		429,720	255,366	686,174
Giraffe Bull Yard/Twiga Tented Camp				392,492	179,590	572,082
Furniture & Fixtures	88,407	106,646	92,892	34,197	13,262	335,405
Computers		22,695		200,234	84,432	307,361
Train, Track, Trestle	131,475		173,025			304,500
Bird House					169,795	169,795
Cheetah Yard Expansion			102,164			102,164
Artwork	18,750	4,600	49,000			72,350
Exhibit Technology	50,257		3,920			54,177
Bowyer Farm Cheetah Run				46,235		46,235
Software			17,779	11,799		29,578
Total Capital Additions	\$ 10,821,634	\$ 8,163,734	\$ 8,132,302	\$ 10,304,897	\$ 9,244,456	\$ 46,667,024

Of note in terms of dollars, the top five projects represent approximately 80% of the total expenditures. The largest addition, Africa (Phases 2-5) comprises the construction of a cheetah encounter, Africa Savannah and Hippo Exhibits. Gorilla World is a \$12 million dollar project scheduled to open in fiscal year 2018. The other major expenditure is houses and land surrounding the zoo representing 18% of total capital additions. Management has indicated that properties being purchased around the CZ&BG are being acquired as part of a strategic plan to expand outside of the CZ&BG's present footprint, primarily to increase parking. The CZ&BG is currently in the early development stages of a 2025 "Master Plan" that is associated with the 150th anniversary of the Cincinnati Zoo and Botanical Garden. It should be noted that no immediate expansion plans have been green lighted as of the date of this report, however it is the CZ&BG's desire to begin additional expansion during the next levy cycle. The first phase of any future expansion will likely include a parking garage on the corner of Vine Street and Erkenbrecher Avenue. The addition of a parking garage will open up other land currently being used for parking, for future Zoo buildings and exhibits.

In general terms, capital improvements can be classified in the following categories:

Expansion and new Exhibits like the Africa Savannah and Gorilla World: These new exhibits are paid for by donations generated through capital campaigns.

Infrastructure upgrades: This category includes upgrades like the Vine Street entrance that came online in 2012 or the conversion to LED lighting. While some of the cost for infrastructure upgrades may be paid for by grants or donors, the majority is funded through available operating funds.

Capital upgrades to existing exhibits needed to improve the current care of animals: The CZ&BG must continually meet increasing industry standards and requirements. While some of these upgrades are funded through capital campaigns, a large portion of the cost must be funded through available operating funds.

Capital upgrades needed to extend the useful life of existing buildings: The CZ&BG presently has over 80 buildings that have a wide range of remaining useful lives. For example, when the general public sees an exhibit, for example the new Hippo Cove, they see the following:



However, the following pictures represent the actual infrastructure that goes into a complex exhibit:

Aerial view of Hippo Cove



Hippo Cove Infrastructure



Hippo Cove – 3,000 gal Sand Filter Tanks – 75,000 lbs each when full

Every building and exhibit at the CZ&BG may need major repairs and maintenance to maximize and extend their useful lives. While newer exhibits like Hippo Cove have been constructed to some of the highest standards currently achievable, the vast majority of the CZ&BG's buildings and exhibits were constructed in previous decades using now outdated standards.

Summary Finding

Expansion and new exhibits are paid for by donations generated through capital campaigns. With expansion and new exhibits comes increased future capital improvement and maintenance costs that must be paid for in large part by operating funds.

Capital Replacement Needs

The following exhibit is the result of a detailed study conducted by outside consultants. The exhibit provides a ten-year forecast of the capital replacement needs of the CZ&BG associated with the park's existing buildings and exhibits. Not presented is the significant underlying detail that was utilized to generate the detailed study.

The forecast below primarily addresses the buildings and their contents (i.e. equipment). It does not address other significant areas, including the CZ&BG's fleet of vehicles, I.T. (servers, high-end cameras, switches, etc.), Site Utilities (electric mains, transformers, water mains, etc.), the Solar Array, roads, bridges, decks, sidewalks, trains and the carousel. Management estimates that these additional areas will add approximately \$1 million to the annual forecast of capital replacement needs.

Exhibit 5 Ten Year Forecast of Capital Replacement Needs for Buildings and Exhibits in Place

Total Inflated Est. Cost	Year										
Location	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Grand Total
4D Theater & Bird Show		12,061	68,822	53,450				71,971			206,304
Administration			57,042	17,288			20,533	55,236			150,099
Africa Hoof Stock					102,390						102,390
ANIMAL AMBASSADOR CENTER	24,142	15,219					5,693			2,538	47,592
Animal Hospital		135,004	114,495	33,384			141,266	18,031	12,505		454,684
Aquatics Office			24,372								24,372
Base Camp Café	84,967		25,256	9,899	37,645	114,596		16,505			288,869
Bear Line								1,323	44,754		46,077
Bird House		3,856	65,293		4,895	7,525	39,119	80,470	52,551	51,367	305,077
Black Rhino		17,669				6,189		3,592			27,451
Blacktop Pathways	1,404,075										1,404,075
Blakelys Barn			24,371		43,418			6,400		3,422	77,611
Carousel	944					26,816					27,760
Cat Show Holding								16,359			16,359
Childrens Zoo Barn (holding)			10,490		3,090	1,247		13,120			27,947
Childrens Zoo Barn (Office)			6,339			6,365	23,637			2,407	38,749
Clubhouse		40,298	65,518				64,380	20,946			191,142
Commissary & Barn	1,888		110,710	36,205					11,717		160,521
CREW	21,138		157,540	14,257	179,578	46,045	29,132	114,788	11,019	13,772	587,270
Dury Entry Ticketing								5,255			5,255
Dury Parking Lot Booth		30,127					14,533				44,660
Eadys			3,554								3,554
Eagle Eyrie			4,620								4,620
Education Center	1,890		68,513	106,984		12,264		682,571	78,797	27,607	978,626
Elephant House	3,649		176,477				94,403	802,497		229,760	1,306,785
Gibbon Island		2,254	10,679				3,111				16,044
Giraffe Barn					95,008	20,058		87,911		57,000	259,976
Go Green Garden Pavilion					101,461						101,461
Greenhouses								5,497			5,497
Hippo								8,227	143,446	3,552	155,225
Insectarium		19,727	25,811	28,252				17,877	40,317	45,978	177,963
Intern House	24,522								113,768		138,290
Jungle Trails East						47,392		19,550			66,941
Jungle Trails Stork					4,482	8,281				3,384	16,147
Jungle Trails West		4,153			160,802	19,283		36,586	56,893		277,717
Komodo				14,340			1,392	8,233	102,411	17,362	143,738
Main Entry Gift Shop	45,208			16,499				70,444			132,150
Main Entry Pavilion						13,668			14,242		27,910
Main Entry Restroom						12,740					12,740
Main Entry Ticketing	15,396					23,095	13,261				51,752
Maintenance	24,505			21,410		1,874	5,603			37,325	90,718
Manatee Springs	208,832	409,222	16,692		128,869	17,528	76,817	62,862		49,697	970,519
Night Hunters	4,032		41,319					76,275	220,208	8,156	349,989
Operations	12,657	12,106	20,255		8,169	9,312					62,499
Otter Holding			2,310								2,310
Otter Pump House	6,689					25,076					31,765
Passenger Pigeon						31,559					31,559
Peacock Pavilion						38,536					38,536
Penguin Pump House			7,096				5,064				12,161
Polar Bear Pump/ Larosas	26,414	9,242	40,366			96,365	15,085	32,718			220,190
Power House				2,178	6,186	3,155					11,520
Primate Center	6,726					38,595	93,285	12,671		8,728	160,004
Purchasing	16,937			10,451		54,355			14,231	3,814	99,788
Quarantine		10,991				9,830	110,876		19,847		151,544
Random Encounter Holding			9,235					23,083		3,582	35,900
Red Panda		2,183						3,432			5,615
Reptile House			39,001		48,572	11,420	5,337	26,242		22,035	152,606
Safari Camp Picnic Shelters			79,763						58,556		138,319
Safari Grill	75,840		18,503					36,050			130,393
Safari Lodge		163,814	16,155			9,565			9,851		199,385
Safari Restrooms	12,362		13,642						329		26,332
Safari Ticketing	2,732										2,732
Sea lion pump room						7,272					7,272
Skyline Chili					31,967				2,038		34,006
Snow Leopard holding										34,488	34,488
Snow Monkey Island			10,517		49,732			23,066			83,316
Snow Monkey Island Pump House		159,321	30,621								189,941
SSA Warehouse									60,942	14,141	75,083
Train Station						30,132					30,132
Tree Tops	75,177	34,437	152,528			6,104	10,862	63,101	2,631		344,840
USDA GATES AND FENCE	5,046				11,087		12,141	4,074		3,924,303	3,956,650
Veldt	70,145	2,567	1,525		28,275				59,139	36,909	198,559
Watering Hole	2,451		22,854			7,525				6,392	39,222
White Lion									3,478	17,475	20,952
Wild Dog Holding									9,358		9,358
Wildlife Canyon	2,493		5,718			5,269		20,588			34,067
Wolf Woods										8,231	8,231
Wolf Woods Education Building			7,313		35,483						42,796
Grand Total	2,180,858	1,084,252	1,555,315	364,598	1,081,110	769,037	785,531	2,547,546	1,143,025	4,633,423	16,144,694

Review of Maintenance Expenditures

According to our findings, maintenance projects not included in the normal budget, are generally undertaken when the CZ&BG's management has determined that an operating surplus is available or when funds from unrestricted gifts are earmarked for major maintenance by the board.

The following exhibit presents maintenance and repairs in excess of the normal budgeted amounts.

Exhibit 6 Maintenance and Repair Expense - Budget vs. Actual

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Total Maintenance and Repairs expensed	\$ 2,757,106	\$ 1,978,107	\$ 1,716,450	\$ 1,952,918	\$ 1,377,985
Approximate budget - normal reoccurring repairs and maintenance	(618,000)	(630,000)	(648,000)	(1,391,000)	(1,434,000)
Maintenance and Repairs - Unfunded (under budget)	\$ 2,139,106	\$ 1,348,107	\$ 1,068,450	\$ 561,918	\$ (56,015)

Beginning in 2016, Management increased the budget for reoccurring repairs and maintenance to better account for maintenance projects on an ongoing basis.

In addition, beginning in 2016, Management started a separate budget of \$2.5 million per year for "reinvestment" to keep up with the capital asset replacement needs of the CZ&BG. The budget, which is subject to availability of funds, covers both forecasted capital asset maintenance as well as needs that arise due to "increased animal care standards".

The following exhibit summarizes reinvestment projects that have been approved for 2018. It should be noted that some of the expenditures on the following exhibit may extend the life of existing assets and therefore be capitalized while other expenditures may meet the definition of a repair and be expensed.

Exhibit 7

Projects Approved for 2018			Approved	Provides
<u>Exhibit/location</u>	<u>Description</u>		Subject to funds <u>Availability</u>	Increased <u>Level of Care</u>
Wolf Woods	upgrade or build new	\$	50,000	yes
JT	orang holding modifications		100,000	yes
Night Hunters	galvanize/stainless?		250,000	yes
Bearcat	need outdoor caging		50,000	yes
Bird House	install mesh to prevent escape		5,000	
lemur island	lemur lookout modifications		10,000	yes
condor exhibit	install heated concrete pool for bathing		15,000	yes
nursery	convert to interpretive animal holding		50,000	yes
Night Hunters	modify to provide a digging area + misc. issues		15,000	yes
JT	scales for primates		25,000	yes
Africa	need chain link squeeze/chute in holding		10,000	yes
cougar	replace real log replaced with artificial structure		30,000	
Interpretive	Long list of misc. improvements		40,000	yes
Night Hunters	replace garage doors with solid double doors		20,000	
hippo	screw press for parkson screen		30,000	
little penguins cz	complete overhaul of filtration		25,000	yes
bear line	modification of chiller		400,000	yes
Train	install a working pa system		15,000	
Education	new tables and chairs		10,000	
security	next phase of cameras and access control		150,000	yes
horticulture	john Deere with trailer		15,000	
purchasing	add full frontage awning for dry storage and staging		30,000	
bear line	add pneumatics to remaining bear line doors		50,000	yes
Group Sales	divide current office into two offices, new door to hall		15,000	
horticulture	smart irrigation		100,000	yes
city barn	level out south side of barn and build storage		50,000	
Vets	blood pressure monitor replacement		7,000	
Vines	Need several hundred feet of artificial vines		50,000	
Swan Lake	Replace final third of bridge		50,000	
CREW	Window and flashing replacement		50,000	
CREW	Ceiling Tile and Paint		20,000	
security	modify space		5,000	
Vine Houses	3444 Vine repairs for long term rental		25,000	
Vine Houses	Bust on hort house and the add of the hort bin area		92,000	
Bear Line	Misc polar bear husbandry items		50,000	yes
IT	PA system		175,000	
CREW	Misc. equipment		60,000	
horticulture	Retaining Wall Issue		250,000	
Train	New Train Engine		215,000	
		\$	2,609,000	

Summary Finding

The CZ&BG is a mix of both modern, new exhibits and aging exhibits, and in many instances outdated infrastructure. Funding requirements for future major maintenance projects, upgrades and refurbishments are expected to continue to increase. This puts pressure on the CZ&BG to find a consistent source of funds for these large and costly projects.

We believe Management's annual \$2.5 million budget for reinvestment is well thought out, but may in fact be on the low end of what is actually needed to fund both capital asset replacement needs and provide for the continually increasing animal care standards.

Bank and Bond Debt Analysis

The CZ&BG has had outstanding notes payable and bonds payable over the full term of the most recent levy period. In our analysis, we are focusing on these credit relationships as of March 31, 2017.

Lines of credit:

The CZ&BG primarily uses lines of credit to meet short-term liquidity requirements. At March 31, 2017, no amounts were outstanding on the line of credit. A line of credit totaling \$5,500,000 is available to CZ&BG.

Notes and Bonds Payable

Exhibit 8

CZ&BG Bond and Note Debt Amortization Schedule (Totals agreed to Audited Financial Statements)								
Fiscal Year	G-1227 Bond	\$4 Million Port Authority	\$.75 Million Port Authority	Total Bonds	Africa Capital	Parking Capital	Total Notes	Total Bonds & Notes
2018	485,000	220,000	35,000	740,000	1,000,000	200,000	1,200,000	1,940,000
2019	495,000	225,000	35,000	755,000	2,200,000	200,000	2,400,000	3,155,000
2020	495,000	230,000	35,000	760,000		200,000	200,000	960,000
2021	480,000	240,000	35,000	755,000		200,000	200,000	955,000
2022	355,000	245,000	35,000	635,000		200,000	200,000	835,000
Thereafter		515,000	140,000	655,000		1,000,000	1,000,000	1,655,000
	<u>2,310,000</u>	<u>1,675,000</u>	<u>315,000</u>	<u>4,300,000</u>	<u>3,200,000</u>	<u>2,000,000</u>	<u>5,200,000</u>	<u>9,500,000</u>

As the Exhibit on the previous page demonstrates, over the term of the most recent levy period, the CZ&BG has had notes payable to commercial banks outstanding. Intended to satisfy intermediate funding requirements, the notes payable bear interest rates based on LIBOR.

Notes payable:

As of March 31, 2017, the CZ&BG had notes payable totaling \$5,200,000 with interest rates ranging from 2.28% to 2.43%. Notes payable are aligned with capital projects such as the Africa Savannah including Hippo Cove and Parking upgrades, and notes are paid from corresponding pledges. Pledge payments can cover multiple future years. Typically, construction will begin before all pledge payments are received. CZ&BG has a good history of pledge collection and expects remaining uncollected pledges will pay down when received. Proceeds from pledges receivable relating to these projects appear to be aligned to fund the repayment of the currently outstanding notes payable.

Bonds Payable:

Over the full term of the most recent levy period, the CZ&BG has also had outstanding bonds payable to the Port Authority and to the City of Cincinnati. The bonds are used to meet the longer term funding requirements of the CZ&BG.

As of March 31, 2017, the CZ&BG had net bonds payable totaling \$4,172,181. Its City of Cincinnati bonds carried interest rates of 2.0% to 2.55% while interest rates on the Port Authority bonds were variable and fluctuated around the 1.05% mark.

Summary Finding

In the interest of long-term sustainability, we recommend the CZ&BG consider establishing a board-designated fund within the Foundation to fund the repayment of its outstanding bond obligations.

Operating Results and Change in Net Assets

We prepared the following Operating Income (Loss) Analysis using both the CZ&BG's audited financial statements as well as internal trial balance data and supporting schedules provided by management. While the following analyses are based on the CZ&BG's audited financial statements, the following modifications in structure were undertaken for analytical and presentational purposes:

- Capital campaign revenue from estates and gifts that were either board-designated or donor-restricted for capital improvements has been presented separately from operating revenues.
- Interest expense and depreciation have been reported separately from operations as these items are capital-related and are funded by capital fundraising.

Exhibit 9

Operating Income (loss) Analysis					
	2013	2014	2015	2016	2017
Operating Revenues					
Admissions	\$ 7,572,529	\$ 8,170,146	\$ 8,191,662	\$ 9,850,534	\$ 9,125,968
Memberships	6,857,685	7,299,244	7,855,554	8,710,833	9,249,136
Attractions	1,342,040	1,545,301	1,478,425	1,645,971	1,643,794
Parking	1,016,832	1,057,150	1,153,850	1,240,907	1,420,934
Programs	1,252,505	1,325,596	1,245,647	1,320,048	1,461,031
Commissions	1,706,781	1,895,233	1,929,405	2,261,675	2,085,859
Rental income	410,619	462,094	532,465	355,517	242,917
Other income	365,684	432,833	407,671	556,508	616,648
Unrestricted Gifts	1,221,489	632,277	958,843	1,069,500	1,056,581
Designated Gifts	1,026,275	1,108,996	1,621,357	1,231,712	2,026,559
Grants	852,438	172,860	204,479	385,746	446,337
Fundraising Events	916,465	1,048,021	1,167,954	975,791	953,218
Sponsorships (Marketing & Events)	514,376	784,920	758,134	1,299,128	1,498,158
Tax Levy	6,755,300	6,765,300	6,496,175	6,550,003	6,550,000
	31,811,018	32,699,971	34,001,621	37,453,873	38,377,140
Operating Expenses					
Animal Care and Health	8,895,007	9,470,706	9,856,133	10,306,221	10,516,330
Horticulture	988,617	1,043,923	1,079,510	1,143,312	1,291,964
Membership and Park Operations	3,537,059	3,920,524	4,306,704	4,617,370	4,781,539
Facilities and External Properties	5,231,631	4,558,671	5,004,339	5,082,463	4,779,854
General & Administrative	3,115,972	2,808,953	3,734,700	3,478,256	3,573,707
Events and Group Functions	4,473,481	4,432,411	4,523,920	4,986,041	4,602,508
Education	1,758,120	1,845,686	1,543,177	1,551,744	1,735,322
CREW	1,172,118	1,146,528	1,225,026	1,377,240	1,512,911
Fundraising	959,713	1,232,208	1,030,414	1,071,350	1,166,249
	30,131,718	30,459,610	32,303,923	33,613,997	33,960,384
Operating income (loss)	1,679,300	2,240,361	1,697,698	3,839,876	4,416,756
Other income					
Investment income - operations	34,803	19,417	36,307	35,950	34,708
Capital campaign	7,169,009	4,601,185	4,602,564	5,207,289	9,532,438
	7,203,812	4,620,602	4,638,871	5,243,239	9,567,146
Other Expenses					
Interest expense	365,440	399,330	396,946	328,681	311,583
Depreciation	4,688,994	5,154,313	5,791,824	6,073,773	6,260,139
	5,054,434	5,553,643	6,188,770	6,402,454	6,571,722
Income (loss) before endowment	3,828,677	1,307,319	147,800	2,680,661	7,412,180
Endowment Activity					
Endowment estates and gifts	613,091	415,152	360,302	286,939	1,393,329
Investment income endowment	1,584,243	1,754,670	1,087,520	(31,353)	1,188,331
Change in beneficial interest in trusts	29,030	98,814	(24,403)	(389,943)	75,920
Endowment expenses	(183,840)	(118,939)	(135,461)	(128,670)	(112,585)
	2,042,524	2,149,697	1,287,958	(263,027)	2,544,995
Change in net assets	\$ 5,871,201	\$ 3,457,016	\$ 1,435,758	\$ 2,417,634	\$ 9,957,175

The Exhibit above groups all operating revenues together, including both revenue and expenses related directly to park operations as well as revenue from programs, unrestricted gifts, public support (levy), and other ancillary income. The entire CZ&BG operations subset shows a favorable increase in operating income when measured before major maintenance expenditures.

Our next Exhibit alters the operating statement to show revenues and expenses directly generated and earned by park operations separately. The purpose of this analysis is to reveal trends in the CZ&BG's reliance on the tax levy as well as in its attraction of other nonoperating revenues, such as unrestricted gifts, bequests, and traditional fundraising.

Exhibit 10

Direct Operating Income (loss) Analysis By Department					
	2013	2014	2015	2016	2017
Direct Operating Revenues					
Admissions (1)	\$ 7,572,529	\$ 8,170,146	\$ 8,191,662	\$ 9,850,534	\$ 9,125,968
Memberships	6,857,685	7,299,244	7,855,554	8,710,833	9,249,136
Attractions	1,342,040	1,545,301	1,478,425	1,645,971	1,643,794
Parking	1,016,832	1,057,150	1,153,850	1,240,907	1,420,934
Commissions	1,706,781	1,895,233	1,929,405	2,261,675	2,085,859
	<u>18,495,867</u>	<u>19,967,074</u>	<u>20,608,896</u>	<u>23,709,920</u>	<u>23,525,691</u>
Direct Operating Expenses					
Animal Care and Health	(8,895,007)	(9,470,706)	(9,856,133)	(10,306,221)	(10,516,330)
Horticulture	(988,617)	(1,043,923)	(1,079,510)	(1,143,312)	(1,291,964)
Membership and Park Operations	(3,537,059)	(3,920,524)	(4,306,704)	(4,617,370)	(4,781,539)
Facilities and External Properties	(5,231,631)	(4,558,671)	(5,004,339)	(5,082,463)	(4,779,854)
Events and Group Functions	(4,473,481)	(4,432,411)	(4,523,920)	(4,986,041)	(4,602,508)
General & Administrative	(3,115,972)	(2,808,953)	(3,734,700)	(3,478,256)	(3,573,707)
	<u>(26,241,767)</u>	<u>(26,235,188)</u>	<u>(28,505,306)</u>	<u>(29,613,663)</u>	<u>(29,545,902)</u>
Operating Loss From Direct Operations Before Levy and Other	(7,745,900)	(6,268,114)	(7,896,410)	(5,903,743)	(6,020,211)
Rental income	410,619	462,094	532,465	355,517	242,917
Other income	365,684	432,833	407,671	556,508	616,648
Tax Levy	6,755,300	6,765,300	6,496,175	6,550,003	6,550,000
	<u>(214,297)</u>	<u>1,392,113</u>	<u>(460,099)</u>	<u>1,558,285</u>	<u>1,389,354</u>
Direct Operating income after Levy and Other	(214,297)	1,392,113	(460,099)	1,558,285	1,389,354
Program Revenues and Expense					
Programs (1)	1,252,505	1,325,596	1,245,647	1,320,048	1,461,031
Designated Gifts	1,026,275	1,108,996	1,621,357	1,231,712	2,026,559
Grants	852,438	172,860	204,479	385,746	446,337
Revenue Sub-total	<u>3,131,218</u>	<u>2,607,452</u>	<u>3,071,483</u>	<u>2,937,506</u>	<u>3,933,927</u>
Education	(1,758,120)	(1,845,686)	(1,543,177)	(1,551,744)	(1,735,322)
CREW	(1,172,118)	(1,146,528)	(1,225,026)	(1,377,240)	(1,512,911)
Program Revenues and Expense, net	200,980	(384,762)	303,280	8,522	685,694
Unrestricted Gifts and Fundraising					
Unrestricted Gifts	1,221,489	632,277	958,843	1,069,500	1,056,581
Zoofari fundraiser	916,465	1,048,021	1,167,954	975,791	953,218
Sponsorships (Marketing & Events)	514,376	784,920	758,134	1,299,128	1,498,158
Revenue Sub-total	<u>2,652,330</u>	<u>2,465,218</u>	<u>2,884,931</u>	<u>3,344,419</u>	<u>3,507,957</u>
Fundraising	(959,713)	(1,232,208)	(1,030,414)	(1,071,350)	(1,166,249)
Unrestricted Gifts and Fundraising	1,692,617	1,233,010	1,854,517	2,273,069	2,341,708
Operating income	1,679,300	2,240,361	1,697,698	3,839,876	4,416,756
Other income					
Investment income - operations	34,803	19,417	36,307	35,950	34,708
Capital campaign	7,169,009	4,601,185	4,602,564	5,207,289	9,532,438
	<u>7,203,812</u>	<u>4,620,602</u>	<u>4,638,871</u>	<u>5,243,239</u>	<u>9,567,146</u>
Other Expenses					
Interest expense	365,440	399,330	396,946	328,681	311,583
Depreciation	4,688,994	5,154,313	5,791,824	6,073,773	6,260,139
	<u>5,054,434</u>	<u>5,553,643</u>	<u>6,188,770</u>	<u>6,402,454</u>	<u>6,571,722</u>
Income before endowment	3,828,677	1,307,319	147,800	2,680,661	7,412,180
Endowment Activity					
Endowment estates and gifts	613,091	415,152	360,302	286,939	1,393,329
Investment income endowment	1,584,243	1,754,670	1,087,520	(31,353)	1,188,331
Change in beneficial interest in trusts	29,030	98,814	(24,403)	(389,943)	75,920
Endowment expenses	(183,840)	(118,939)	(135,461)	(128,670)	(112,585)
	<u>2,042,524</u>	<u>2,149,697</u>	<u>1,287,958</u>	<u>(263,027)</u>	<u>2,544,995</u>
Change in net assets	\$ 5,871,201	\$ 3,457,016	\$ 1,435,758	\$ 2,417,634	\$ 9,957,175

(1) after reclass of school revenue not recorded for financial statement presentation.

The analysis on the previous page indicates that there has been a \$5.0 million increase in annual direct operating revenues (gate admissions, memberships, parking, food service, etc.) measured from 2013 to 2017 while annual direct operating expenses have increased by \$4.0 million resulting in a \$1.0 million reduction of direct operating losses (before levy support, unrestricted gifts, and fundraising), during this period. Over the same period, all operating revenues increased by \$6.6 million while all operating expenses increased by \$3.8 million. The operating revenues increased at a greater rate than operating expenses. Operating income includes programs, unrestricted and designated gifts, all net of related expenses in addition to direct operating revenue and expenses. CZ&BG has benefited from increases in program revenues and in designated and unrestricted gifts, resulting in overall positive operating results.

Summary Finding

Measured from 2013 to 2017, annual direct operating losses before levy support, unrestricted gifts, and fundraising have decreased by \$1.0 million over the period. This is a strong indicator that its overall financial position is strengthening resulting in improved positive operating results; however, the CZ&BG remains reliant on unpredictable private support and on public (levy) support over this period.

The findings on the previous page are reinforced by the analysis in the chart below, of direct operating income and loss per admission.

Exhibit 11

Direct operating Income (loss) Analysis Per Admission					
	2013	2014	2015	2016	2017
Gate Attendance	<u>1,395,717</u>	<u>1,502,095</u>	<u>1,505,395</u>	<u>1,629,477</u>	<u>1,631,866</u>
Direct Operating Revenues					
Admissions	\$ 5.43	\$ 5.44	\$ 5.44	\$ 6.05	\$ 5.59
Memberships	4.91	4.86	5.22	5.35	5.67
Attractions	0.96	1.03	0.98	1.01	1.01
Parking	0.73	0.70	0.77	0.76	0.87
Commissions	1.22	1.26	1.28	1.39	1.28
	<u>13.25</u>	<u>13.29</u>	<u>13.69</u>	<u>14.55</u>	<u>14.42</u>
Direct Operating Expenses					
Animal Care and Health	(6.37)	(6.30)	(6.55)	(6.32)	(6.44)
Horticulture	(0.71)	(0.69)	(0.72)	(0.70)	(0.79)
Park Operations	(2.53)	(2.61)	(2.86)	(2.83)	(2.93)
Facilities and External Properties	(3.75)	(3.03)	(3.32)	(3.12)	(2.93)
Events and Group Functions	(3.21)	(2.95)	(3.01)	(3.06)	(2.82)
General & Administrative	(2.23)	(1.87)	(2.48)	(2.13)	(2.19)
	<u>(18.80)</u>	<u>(17.47)</u>	<u>(18.94)</u>	<u>(18.17)</u>	<u>(18.11)</u>
Operating Loss From Direct Operations Before Levy and Other	(5.55)	(4.17)	(5.25)	(3.62)	(3.69)
Rental income	0.29	0.31	0.35	0.22	0.15
Other income	0.26	0.29	0.27	0.34	0.38
Tax Levy	4.84	4.50	4.32	4.02	4.01
	<u>5.39</u>	<u>5.10</u>	<u>4.94</u>	<u>4.58</u>	<u>4.54</u>
Direct Operating income after Levy and Other	(0.15)	0.93	(0.31)	0.96	0.85
Program Revenues and Expense					
Programs	0.90	0.88	0.83	0.81	0.90
Designated Gifts	0.74	0.74	1.08	0.76	1.24
Grants	0.61	0.12	0.14	0.24	0.27
Revenue Sub-total	<u>2.24</u>	<u>1.74</u>	<u>2.04</u>	<u>1.80</u>	<u>2.41</u>
Education	(1.26)	(1.23)	(1.03)	(0.95)	(1.06)
CREW	(0.84)	(0.76)	(0.81)	(0.85)	(0.93)
Program Revenues and Expense, net	0.14	(0.26)	0.20	0.01	0.42
Unrestricted Gifts and Fundraising					
Unrestricted Gifts	0.88	0.42	0.64	0.66	0.65
Zoofari fundraiser	0.66	0.70	0.78	0.60	0.58
Sponsorships (Marketing & Events)	0.37	0.52	0.50	0.80	0.92
Revenue Sub-total	<u>1.90</u>	<u>1.64</u>	<u>1.92</u>	<u>2.05</u>	<u>2.15</u>
Fundraising	(0.69)	(0.82)	(0.68)	(0.66)	(0.71)
Unrestricted Gifts and Fundraising	1.21	0.82	1.23	1.39	1.43
Operating income (loss)	\$ 1.20	\$ 1.49	\$ 1.13	\$ 2.36	\$ 2.71
Other income					
Investment income - operations	0.02	0.01	0.02	0.02	0.02
Capital campaign	5.14	3.06	3.06	3.20	5.84
	<u>5.16</u>	<u>3.08</u>	<u>3.08</u>	<u>3.22</u>	<u>5.86</u>
Other Expenses					
Interest expense	0.26	0.27	0.26	0.20	0.19
Depreciation	3.36	3.43	3.85	3.73	3.84
	<u>3.62</u>	<u>3.70</u>	<u>4.11</u>	<u>3.93</u>	<u>4.03</u>
Income (loss) before endowment	2.74	0.87	0.10	1.65	4.54

The exhibit on the previous page measures operating revenue and expenses and further emphasizes CZ&BG's operating losses from direct operations before Levy and Other. Due to increased program revenues, gifts and fundraising, CZ&BG has been able to increase their operating income per admission.

Operating Revenues and Attendance

From fiscal year 2013 to fiscal year 2017, the CZ&BG experienced a 17% increase in attendance. Fiscal years 2013, 2014 and 2016 experienced modest increases in attendance while attendance in fiscal years 2015 and 2017 were nearly flat.

Exhibit 12

Attendance Analysis					
	Fiscal years ended March 31,				
	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Actual	Actual
Adult	178,033	179,688	179,275	133,591	146,092
Child	79,853	77,578	75,164	57,397	58,008
Adult - Discounts & Promo	96,526	97,361	102,148	151,429	147,007
Child - Discounts & Promo	52,175	53,827	55,147	78,571	74,707
Schools	83,890	87,153	87,071	84,969	81,032
Education	26,048	27,000	22,445	22,746	24,820
Complimentary	51,340	56,593	61,335	59,795	54,137
Group Sales	132,594	173,026	147,802	163,372	136,222
Member Admits	695,258	749,869	775,008	877,607	909,841
Gate Attendance	1,395,717	1,502,095	1,505,395	1,629,477	1,631,866
Percentage increase	<u>9.3%</u>	<u>7.6%</u>	<u>0.2%</u>	<u>8.2%</u>	<u>0.1%</u>

The most significant increase in attendance occurred with the Memberships ("Member Admits"), which increased by 30%, which is almost double the increase in total attendance. Over the five-year period from 2013 through 2017, total attendance increased by 236,149, with Memberships ("Member Admits") making up 214,583 of that increase. Regular admissions (including discount admissions) have increased by 19,227 since 2013, while group sales have increased by 3,628.

Fiscal year 2018 attendance is anticipated to reach 1.8 million largely due to the public interest in Fiona. Recognizing fiscal year 2018 as an outlier year, management anticipates fiscal year 2019 attendance around 1.5 – 1.6 million.

Summary Finding

CZ&BG experiences increased attendance in years of a new exhibit or even a new animal as is the case of Fiona. These events have contributed to positive financial returns over the period reviewed. Management expects attendance to return to a normalized level after the Fiona phenomenon peaks in 2018.

The following analysis of year-to-year revenue increases and decreases highlights the changes in the CZ&BG's operating revenue streams over the last five years.

Exhibit 13

Operating Revenue Analysis							Forecasted
	12/31/2011	2013	2014	2015	2016	2017	12-mo ended 3/31/2018
Operating Revenues							
Admissions	\$6,737,135	\$ 7,572,529	\$ 8,170,146	\$ 8,191,662	\$ 9,850,534	\$ 9,125,968	\$ 10,062,000
Memberships	6,152,791	6,857,685	7,299,244	7,855,554	8,710,833	9,249,136	\$ 10,000,000
Attractions	951,890	1,342,040	1,545,301	1,478,425	1,645,971	1,643,794	\$ 1,818,000
Parking	940,731	1,016,832	1,057,150	1,153,850	1,240,907	1,420,934	\$ 1,566,000
Commissions	1,346,133	1,706,781	1,895,233	1,929,405	2,261,675	2,085,859	\$ 2,304,000
Park Operating Revenue	16,128,680	18,495,867	19,967,074	20,608,896	23,709,920	23,525,691	25,750,000
<i>Percentage increase (decrease)</i>		12.8%	8.0%	3.2%	15.0%	-0.8%	9.5%
Programs	1,720,349	1,252,505	1,325,596	1,245,647	1,320,048	1,461,031	\$ 1,620,000
		-27.2%	5.8%	-6.0%	6.0%	10.7%	10.9%
Rental income	451,085	410,619	462,094	532,465	355,517	242,917	200,000
Other income	763,591	365,684	432,833	407,671	556,508	616,648	680,182
Total operating revenues	17,343,356	20,524,675	22,187,597	22,794,679	25,941,993	25,846,287	28,250,182
<i>Percentage increase (decrease)</i>		15.5%	8.1%	2.7%	13.8%	-0.4%	9.3%

As our analysis shows, park operating revenue increased steadily from 2013 to 2017 following the same fluctuation trends in attendance. However, its pace of increase was slightly worse than that of attendance. This is largely due to the increases in memberships, which offer unlimited admissions to the CZ&BG.

Admission revenue during FY 2017 decreased, but was offset by a corresponding increase in Membership revenue. Attractions revenue includes fees to experience the theater, carousel, train rides or an all-day pass for these features. The revenue fluctuations largely follow the trends in attendance. The steadily increasing parking revenue reflects the CZ&BG's efforts to improve parking for Zoo guests. During the period under review, the CZ&BG strategically used their space to maximize parking and adding available spaces. Only half of Zoo members purchase the membership package which includes free parking. Commission revenue includes fees for ancillary services such as: food service, face painting, photograph services and the largest catering for group sales. The group sales are variable as larger groups rotate their patronage throughout the community.

Exhibit 14

Park Operating Revenue Per Admission							Forecasted 12-mo ended 3/31/2018
	<u>2011</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	
Gate Attendance	1,279,989	1,395,717	1,502,095	1,505,395	1,629,477	1,631,866	1,800,000
Admissions		\$ 5.43	\$ 5.44	\$ 5.44	\$ 6.05	\$ 5.59	\$ 5.59
Memberships		4.91	4.86	5.22	5.35	5.67	5.67
Attractions		0.96	1.03	0.98	1.01	1.01	1.01
Parking		0.73	0.70	0.77	0.76	0.87	0.87
Commissions		1.22	1.26	1.28	1.39	1.28	1.28
Direct operating revenues per admission		13.25	13.29	13.69	14.55	14.42	14.42
Programs		0.90	0.88	0.83	0.81	0.90	0.90
Total operating revenues per admission		\$ 14.15	\$ 14.18	\$ 14.52	\$ 15.36	\$ 15.31	\$ 15.32

During the period, operating revenue per admission increased at a steady pace from 2013 through 2016 with a slight decrease in 2017. Attendance and revenue are forecasted to exceed 2017 operating revenue per admission in the fiscal year ended March 31, 2018.

The attendance for the year ended March 31, 2018 is forecasted to reach 1.8 million. Management indicated 2018 is an outlier year due to the "Fiona phenomenon". Management expects attendance to return to the year 2017 levels in fiscal year ended 2019.

Our revenue variance analysis, below, shows meaningful fluctuations in several different types of revenue, although the overall trend for all forms of revenue is positive.

Exhibit 15

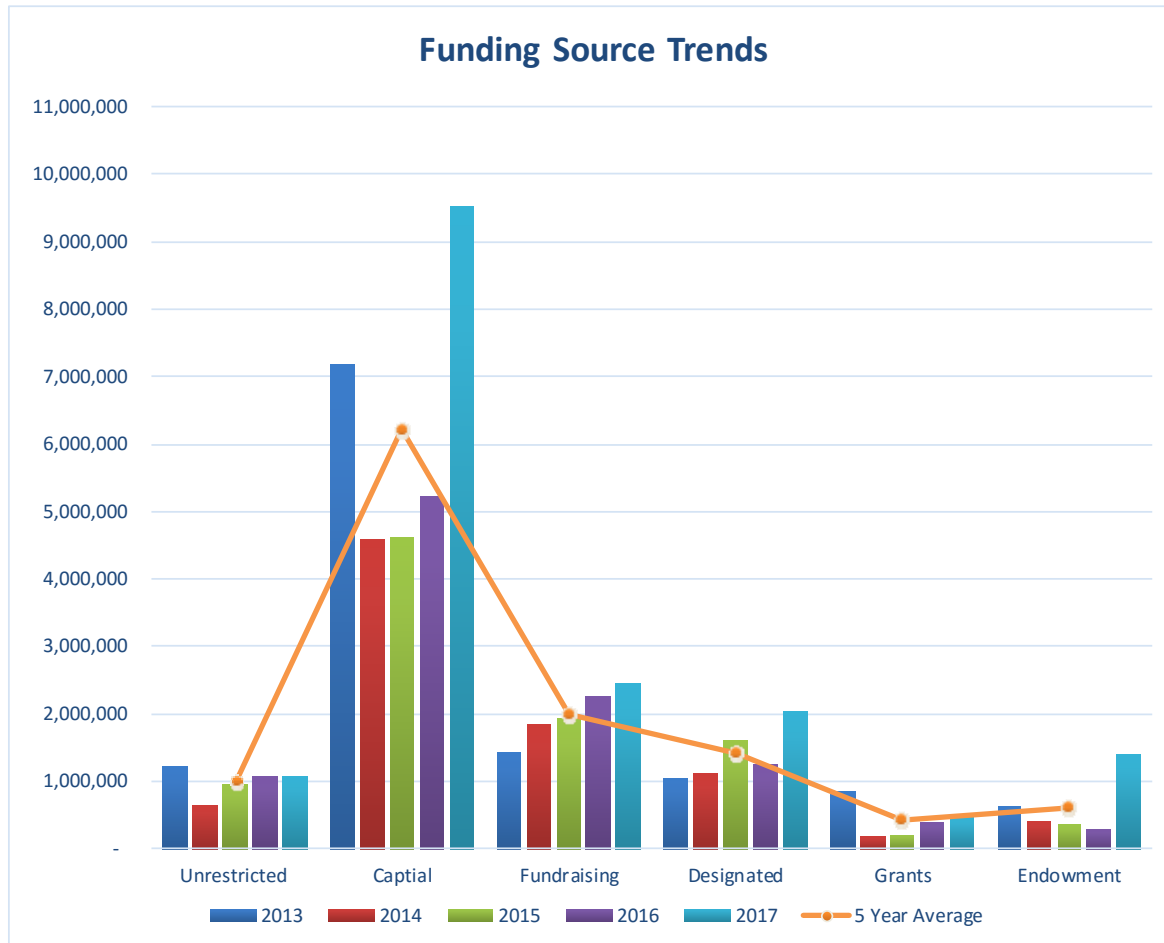
Revenue Variance Analysis	2014	2015	2016	2017	Forecasted 12-mo ended 3/31/2018
Admissions					
Revenue increase (decrease)	\$ 597,617	\$ 21,516	\$ 1,658,872	\$ (724,566)	\$ 936,032
Percentage change	7.9%	0.3%	20.3%	-7.4%	10.3%
Memberships					
Revenue increase (decrease)	441,559	556,310	855,279	538,303	750,864
Percentage change	6.4%	7.6%	10.9%	6.2%	8.1%
Attractions					
Revenue increase (decrease)	203,261	(66,876)	167,546	(2,177)	174,206
Percentage change	15.1%	-4.3%	11.3%	-0.1%	10.6%
Parking					
Revenue increase (decrease)	40,318	96,700	87,057	180,027	145,066
Percentage change	4.0%	9.1%	7.5%	14.5%	10.2%
Programs					
Revenue increase (decrease)	73,091	(79,949)	74,401	140,983	158,969
Percentage change	5.8%	-6.0%	6.0%	10.7%	10.9%
Commissions					
Revenue increase (decrease)	188,452	34,172	332,270	(175,816)	218,141
Percentage change	11.0%	1.8%	17.2%	-7.8%	10.5%
Total					
Revenue increase (decrease)	1,544,298	561,873	3,175,425	(43,246)	2,383,278
Percentage change	8.3%	2.8%	15.4%	-0.2%	10.1%

Overall, the analysis above indicates that from 2013 through 2016, all categories of revenue have experienced an upward trend until 2017 when overall operating revenue decreased slightly with decreases in the Admissions and Commission revenue types.

Analysis of Past and Present Sources of Funding (Gifts, Grants, and Donations)

The following graph summarizes gifts, grants, and donations for years 2013 through 2017 including the five-year average. The category "Capital or Capital Campaign" represents donor pledges less allowances for estimated uncollectable pledges and timing discounts. The graph below illustrates how these revenue sources appear to be subject to fluctuations.

Exhibit 16



As the graph above demonstrates, the CZ&BG received significant and above average gifts and donations during 2017. Overall gifts and donations fluctuated during the period and were unpredictable. Unrestricted gifts and capital campaign contributions were significant during 2013 and 2017 while the years in between saw reduced gifts and contributions. During that period, the CZ&BG maintained above-average fundraising. Designated gifts fluctuated during the period but generally had an increasing trend while grant revenue significantly declined from 2013. A record gift to the endowment was made during 2017 while gifts to the endowment decreased during 2014, 2015 and 2016.

The following schedules detail the gifts, grants and donations used for the graph in Exhibit 16:

Exhibit 17

<u>Gifts, Grants & Donations 2013-2017 Totals and Averages</u>		
	<u>Total</u> <u>2013-2017</u>	<u>Average</u> <u>Per Year</u>
Unrestricted Gifts	\$ 4,938,690	\$ 987,738
Capital campaign	\$ 31,112,485	\$ 6,222,497
Fundraising	\$ 9,916,168	\$ 1,983,234
Designated Gifts	\$ 7,014,899	\$ 1,402,980
Grants	\$ 2,061,858	412,372
Endowment	\$ 3,068,813	\$ 613,763
Total Gifts, Grants and Donations	<u>\$ 58,112,913</u>	<u>\$ 11,622,583</u>

Exhibit 18

<u>Gifts, Grants & Donations Analysis</u>					
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<u>Unrestricted Gifts</u>					
Unrestricted Estates and gifts	1,124,009	828,364	887,570	1,040,207	1,028,024
Futures & Memorials	19,314	14,876	23,591	26,802	15,605
Charitable Annuities & Pooled Income	78,166	(210,963)	47,682	2,491	12,952
Other	-	-	-	-	-
	<u>1,221,489</u>	<u>632,277</u>	<u>958,843</u>	<u>1,069,500</u>	<u>1,056,581</u>
<u>Capital campaign</u>					
General Capital	373,062	255,000	349,856	311,465	1,132,121
Our Zoo Campaign	6,810,296	4,288,414	4,160,881	5,191,747	8,470,600
Allowance for Pledges Rec	(47,147)	17,398	85,006	(145,711)	(74,012)
Present Value Reduction	32,798	40,372	6,821	(150,211)	3,729
	<u>7,169,009</u>	<u>4,601,184</u>	<u>4,602,564</u>	<u>5,207,290</u>	<u>9,532,438</u>
<u>Fundraising</u>					
Fundraising Events	916,465	1,048,021	1,167,955	975,792	953,218
Sponsorships (Marketing & Events)	514,376	784,920	758,134	1,299,129	1,498,158
	<u>1,430,841</u>	<u>1,832,941</u>	<u>1,926,089</u>	<u>2,274,921</u>	<u>2,451,376</u>
<u>Designated Gifts</u>					
Animal Operations	223,736	348,366	334,820	338,439	528,454
CREW	277,475	332,355	673,991	367,736	523,589
Education	530,938	316,734	319,605	230,640	423,552
Graphics	21,000	15,000	15,000	15,000	-
Maintenance	(125,235)	1,060	5,000	5,000	15,000
Development	-	-	250,000	250,000	500,000
Horticulture	98,361	95,481	22,941	24,897	35,964
	<u>1,026,275</u>	<u>1,108,996</u>	<u>1,621,357</u>	<u>1,231,712</u>	<u>2,026,559</u>
<u>Grants</u>					
Animal Operations	-	-	-	-	-
CREW	328,321	115,098	196,179	318,330	246,543
Education	-	-	-	-	93,543
Visitor Services	115,325	57,762	-	29,363	-
Maintenance	406,791				
Horticulture	2,000		8,300	8,714	
External Property				29,339	
Duke Energy Community Grant	-	-	-	-	106,250
Total Grants	<u>852,437</u>	<u>172,860</u>	<u>204,479</u>	<u>385,746</u>	<u>446,336</u>
Total Operating and Capital	11,700,051	8,348,258	9,313,332	10,169,169	15,513,290
Endowment	613,091	415,152	360,302	286,939	1,393,329
Total Gifts, Grants and Donations	\$ 12,313,142	\$ 8,763,410	\$ 9,673,634	\$ 10,456,108	\$ 16,906,619

The data above also makes it clear that gifts, grants, and donations during the last year have exceeded historical averages.

Alternative Sources of Funding Utilized Before Tax Levy Funds

Our examination of the Tax Levy Contract in place during the years studied revealed the intent, expressed within the Contract, that the Tax Levy be considered a "payer of last resort." It is within this context that the Tax Levy Board's request we analyze "alternative sources of funding". The Board asked that we investigate alternatives to tax levy funding in order to determine whether these sources of funding were being utilized before tax levy sources. Within the category of "alternative sources of funding," we include capital campaign funds, regular fundraising (Zoofari and sponsorships), gifts designated for specific uses, unrestricted gifts, and grants.

Regarding unrestricted gifts, the CZ&BG's internal policy states that gifts of less than \$100,000 are placed in the endowment fund, however for gifts greater than \$100,000 only 50% of the gift are placed in the endowment while the disposition of the remaining 50% of gifts greater than \$100,000 is determined by the CZ&BG's Executive Committee. This handling of gifts greater than \$100,000 is a recent change. Previously, CZ&BG's Executive Committee determined the disposition of 100% of gifts greater than \$100,000. During the levy period, unrestricted gifts were used for major maintenance expenses, and significant unrestricted endowment dollars were transferred to fund capital projects.

It is important to note that the CZ&BG's allotment of a portion of unrestricted gifts for major maintenance and capital projects may have increased the sense that levy funds were truly crucial for daily operating functions. In a sense, this goes against the intent of the Tax Levy Contract, which, as noted above, identifies Hamilton County as "the payer of last resort."

Summary Finding

During 2015, 2016 and 2017, unrestricted endowment funds were used to fund capital expenditures as well as property acquisitions. During 2015, \$3 million dollars were used to fund the Africa project and during 2016 and 2017, a total of \$2 million dollars was used for properties adjacent to CZ&BG for future expansion. It appears these funds could have been utilized for necessary operating expenses or maintained in the Endowment and continued the momentum building a strong endowment fund. The choice to spend them in this way suggests the Tax Levy Contract's specification that the County's status as "the payer of last resort" for the CZ&BG could be in question.

An examination of endowment funding over the recent levy period also yields insights regarding the question of "alternative sources of funding."

Endowment Fund Activity

Exhibit 19

Endowment Fund Summary of Activity					
	2013	2014	2015	2016	2017
Endowment net assets at beginning of year	\$ 17,169,553	\$ 18,154,504	\$ 19,427,600	\$ 16,804,909	\$ 15,081,851
Interest and dividend income	450,532	431,751	403,053	399,393	349,105
Realized and unrealized gain (loss) on investments	1,141,813	1,320,474	661,633	(433,193)	836,772
Contributions	610,034	412,236	406,837	286,939	700,403
Expenditure:					
5% Spending	(764,568)	(825,156)	(874,860)	(888,096)	(869,244)
Property acquisition				(1,000,000)	(1,000,000)
Africa-Phase 4			(3,000,000)		
Levy campaign	(306,759)				
Other	(101,254)	(17,769)	(169,976)	(40,863)	(164,868)
Investment fees	(44,847)	(48,440)	(49,378)	(47,238)	(47,805)
Endowment net assets at end of year	<u>\$ 18,154,504</u>	<u>\$ 19,427,600</u>	<u>\$ 16,804,909</u>	<u>\$ 15,081,851</u>	<u>\$ 14,886,214</u>
Appropriation for expenditure as a percentage of average endowment balance	<u>6.6%</u>	<u>4.5%</u>	<u>22.3%</u>	<u>12.1%</u>	<u>13.6%</u>

The table above indicates that during each of the years presented, expenditures from the endowment fund have exceeded contributions to the endowment fund. The net difference in appropriations and contributions ranged from \$(562,547) in 2013 to \$(3,637,999) in 2015. Specific endowment fund activities include the following: In all years the fund transferred the allowable 5% spending of endowment funds to operations. During 2015, a significant expenditure of \$3 million was transferred to repay debt related to a capital project. The construction of the project began prior to the collection of all pledged amounts and was financed with debt. During 2016 and 2017, \$1 million was transferred for the acquisition of properties adjacent to the Zoo and part of their long-term strategic plan. As previously noted, bequests of less than \$100,000 are to be channeled into the endowment fund along with 50% of gifts greater than \$100,000. CZ&BG's Executive Committee determines the disposition of remaining unrestricted estate gifts of greater than \$100,000.

A brief look at the breakout between restricted and unrestricted funds shows a meaningful reduction in unrestricted funds during the period under review:

Exhibit 20

Endowment Fund Summary of Restricted vs. Unrestricted Fund Balances					
	2013	2014	2015	2016	2017
Unrestricted Funds	\$ 8,930,636	\$ 9,489,718	\$ 6,658,855	\$ 5,248,153	\$ 4,727,103
Restricted Funds	9,223,868	9,937,882	10,146,054	9,833,698	10,159,111
Endowment net assets at end of year	<u>\$18,154,504</u>	<u>\$19,427,600</u>	<u>\$16,804,909</u>	<u>\$15,081,851</u>	<u>\$14,886,214</u>

In total, the Endowment decreased by \$4 million from \$18.2 million in 2013 to \$14.9 million in 2017. The fluctuation in restricted funds from 2013 to 2017 was mainly the result of investment value variations. The fluctuation in unrestricted funds, by contrast, stems from both investment value variations and from the practice of appropriating funds for expenditures in excess of contributions.

Summary Finding

As noted in the working capital area, unrestricted endowment funds are being depleted. In the long term, CZ&BG will need to develop sources of unrestricted endowment funds. Considering the significant donations received for various capital campaigns, the potential to leverage those relationships to fund the endowment should be pursued.

Investment Income

The following Exhibit summarizes investment income and average returns for 2013 through 2017. The average return is based on year end balances and is for analysis purposes only.

Exhibit 21

Investment Income Analysis					
	2013	2014	2015	2016	2017
Operating funds					
Interest and dividends	\$ 43,501	\$ 35,253	\$ 46,694	\$ 45,241	\$ 40,762
Net realized and unrealized gains	(3,423)	(10,561)	(5,112)	(4,016)	(779)
	40,078	24,692	41,582	41,225	39,983
Endowment funds					
Interest and dividends	452,984	434,196	405,499	401,840	351,559
Net realized and unrealized gains	1,131,259	1,320,474	682,021	(433,193)	836,772
Change in beneficial interest in trusts	29,030	98,814	(24,403)	(389,943)	75,920
	1,613,273	1,853,484	1,063,117	(421,296)	1,264,251
Combined investment income	<u>1,653,351</u>	<u>1,878,176</u>	<u>1,104,699</u>	<u>(380,071)</u>	<u>1,304,234</u>
Investments - Zoo Society	4,531,342	9,162,785	9,395,014	1,697,685	4,728,353
Investments - Endowment Fund	18,154,504	19,427,600	16,804,909	15,081,851	14,886,214
Investments - year end balances	22,685,846	28,590,385	26,199,923	16,779,536	19,614,567
Beneficial interest in trusts year end balances	3,458,316	3,557,130	3,532,727	3,142,784	3,218,704
Ending Balances Combined	<u>26,144,162</u>	<u>32,147,515</u>	<u>29,732,650</u>	<u>19,922,320</u>	<u>22,833,271</u>
Average combined balance	<u>\$26,523,431</u>	<u>\$29,145,839</u>	<u>\$30,940,083</u>	<u>\$24,827,485</u>	<u>\$21,377,796</u>
Return on average combined balance	6.1%	6.4%	3.4%	-1.7%	5.9%

The investment returns on the previous page indicate that CZ&BG operating funds are invested very conservatively while Endowment funds appear to be subject to more of the market risks typically associated with long-term investing.

Review of Past CZ&BG Tax Levy Information

A look at tax levy funds received during the 2013 to 2017 period shows only minimal year over year fluctuation.

Exhibit 22

<u>Tax Levy Funding Analysis</u>						
Calendar years	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>Estimated 2018</u>
Projected Tax levy Funds	\$ 6,550,000	\$ 6,550,000	\$ 6,550,000	\$ 6,550,000	\$ 6,550,000	\$ 6,550,000
Tax Levy Funds Received	\$ 6,755,300	\$ 6,765,300	\$ 6,496,175	\$ 6,550,003	\$ 6,550,000	\$ 6,550,000
<i>Percentage increase (decrease)</i>	<i>0.9%</i>	<i>0.1%</i>	<i>-4.1%</i>	<i>0.8%</i>	<i>0.0%</i>	<i>0.0%</i>

It should be noted that the CZ&BG is presently projected to receive approximately \$1.2 million less, in total, than what was projected at the beginning of the most recent five-year tax levy period.

The downward trend in tax levy revenue per admission, indicated in the table below, is only secondarily related to fluctuations in tax levy funds received. Its primary cause is the positive indicator of increasing admissions.

Exhibit 23

<u>Tax Levy Revenue Per Admission</u>							Forecasted 12-mo ended <u>3/31/2018</u>
	<u>2011</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	
Gate Attendance	1,279,989	1,395,717	1,502,095	1,505,395	1,629,477	1,631,866	1,800,000
Tax Levy Proceeds per admission		<u>\$ 4.80</u>	<u>\$ 4.50</u>	<u>\$ 4.49</u>	<u>\$ 3.99</u>	<u>\$ 4.01</u>	<u>\$ 3.64</u>

As the Exhibit above demonstrates, there is a positive correlation between increases in gate attendance and decreases in tax levy proceeds per admission.

Operating Expenses

Salaries, wages, payroll taxes, and employee benefits make up more than 50% of the CZ&BG's operating expenses and are therefore the first major category of expense reviewed by us. The following schedule groups these costs by department.

Exhibit 24

Salaries and Wages Expense Analysis					
	2013	2014	2015	2016	2017
Animal Care and Health	\$ 4,722,245	\$ 5,078,449	\$ 5,493,076	\$ 5,576,052	\$ 5,792,524
Horticulture	603,509	640,170	691,005	727,215	783,573
Membership and Park Operations	1,639,135	2,045,296	2,168,025	2,358,816	2,528,581
Facilities and External Properties	1,483,910	1,593,520	1,737,565	1,785,739	1,867,572
General & Administrative	1,204,873	1,091,876	1,261,554	1,062,310	993,353
Events and Group Functions	974,339	967,454	969,164	1,037,250	1,024,362
Education	1,028,306	854,613	874,961	869,432	1,008,960
CREW	679,968	673,149	681,973	772,399	848,615
Fundraising	538,677	586,881	581,583	608,673	627,066
Total Salaries and wages	\$ 12,874,962	\$ 13,531,408	\$ 14,458,906	\$ 14,797,886	\$ 15,474,606
Percentage increase (decrease)	<u>6.2%</u>	<u>5.1%</u>	<u>6.9%</u>	<u>2.3%</u>	<u>4.6%</u>
Total Payroll taxes and benefits	\$ 3,567,154	\$ 3,594,590	\$ 4,353,253	\$ 4,640,908	\$ 4,727,154
Percentage of Salaries and wages	<u>27.7%</u>	<u>26.6%</u>	<u>30.1%</u>	<u>31.4%</u>	<u>30.5%</u>
Total	\$ 16,442,116	\$ 17,125,998	\$ 18,812,159	\$ 19,438,794	\$ 20,201,760
Percentage increase (decrease)	<u>5.0%</u>	<u>4.2%</u>	<u>9.8%</u>	<u>3.3%</u>	<u>3.9%</u>

Salary and wages have increased during the period under review. As CZ&BG expanded and undertook major projects, there became a need for additional personnel, especially in the areas of Animal Care and Health and Facilities. Also of particular note, is the continuing increase in payroll taxes and benefits which represent nearly one third of salary and wages.

Management has indicated that from 2013 through 2017 the CZ&BG's union contract called for 2.5% - 3% increases. In future years the union increases are 2.75% in 2018, then 2.5% for the remaining contract years.

Non-union employees also in many instances received annual increases in line with union employees.

Another way to view the salary and wage increases is depicted in the graph below which evaluates if the expense fluctuations are a result of annual increases or added FTEs. Using the cost per FTE for 2013 as a baseline, we inflated the amount by the average salary and wage increase each year, estimated at 2.75% then calculated the expected annual expense based on actual FTEs. On a per FTE basis for 2016 and 2017 in particular, are representative of the annual wage increases and therefore the annual expense increase is a result of an increase in FTEs.

Exhibit 25

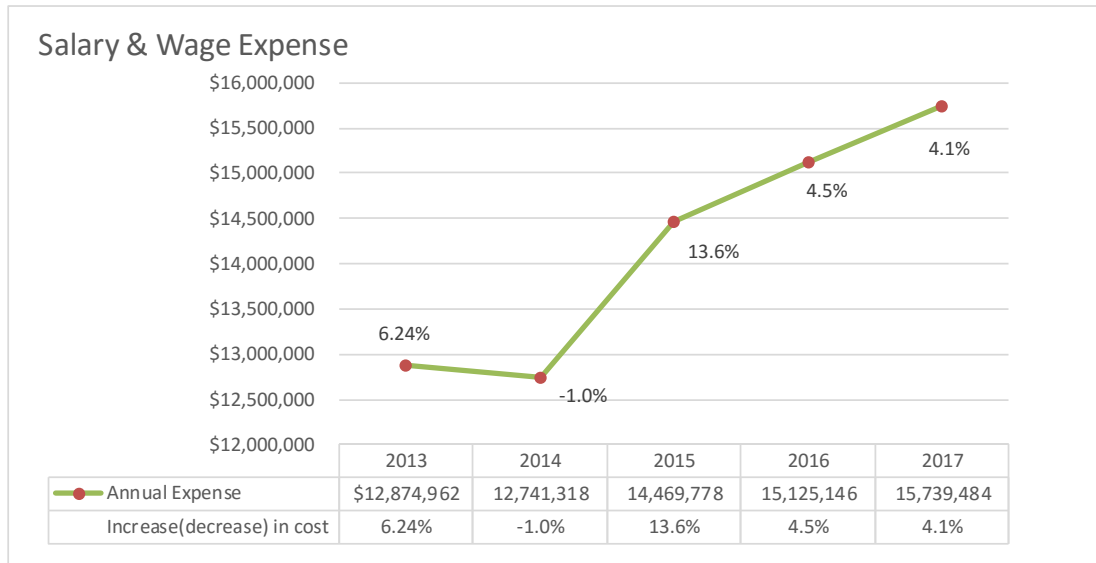


Exhibit 26

Full Time Employee Count					
Department	2013	2014	2015	2016	2017
Animal Operations	1	2	3	2	2
Mammal	8	8	8	8	8
Reptile	4	5	5	4	4
Aviculture	8	8	8	8	7
Insect and Reptile	5	5	5	5	5
Commissary	5	5	5	5	5
Interpretive	3	6	6	7	8
Bird/Cat Show	3	3	3	3	3
Cat Show	4	4	4	4	4
Children's Zoo	5	6	6	6	5
Africa	-	-	5	5	6
Canyon/Veldt	10	-	6	6	6
Elephant	5	5	5	5	5
Manatee	3	3	3	3	3
Night Hunters	6	5	6	7	7
Primate	12	13	13	13	13
Canyon	-	-	4	4	4
Animal Health	5	5	5	5	5
Animal Research	2	2	4	5	4
Plant Research	3	2	2	2	2
Research & Projects	4	4	4	6	6
Crew Admin	1	1	1	1	1
Education	5	4	4	3	3
Programs	3	4	4	4	4
Graphics	3	3	3	3	3
Visitor Interpretation	2	1	2	1	2
School Services	5	4	5	5	4
Americorps	-	-	-	-	1
Development	8	6	7	7	6
Membership	3	3	3	3	3
Marketing	4	4	4	4	4
Admissions	3	5	6	6	7
Group Sales	6	6	6	5	7
Rides & Attractions	2	-	-	-	-
Park Services	9	10	11	11	10
Maintenance	30	31	28	32	32
Horticulture	9	9	11	11	11
Security	6	6	6	6	9
Administration	5	4	4	4	4
Finance	4	3	3	3	3
Information Technology	4	5	5	4	4
Human Resources	3	2	2	2	2
Administration - other	2	2	2	2	2
Purchasing	3	3	2	3	3
Special Events General	1	2	2	2	1
	217	209	231	235	238

Exhibit 27

Salaries and Wages Expense Analysis						
Cost per FTE						
		2013	2014	2015	2016	2017
Total FTEs		217	209	231	235	238
Total Salaries and wages	\$	12,874,962	\$ 13,531,408	\$ 14,458,906	\$ 14,797,886	\$ 15,474,606
Cost per FTE	\$	59,332	\$ 64,744	\$ 62,593	\$ 62,970	\$ 65,019
Total Payroll taxes and benefits	\$	3,567,154	\$ 3,594,590	\$ 4,353,253	\$ 4,640,908	\$ 4,727,154
Cost per FTE	\$	16,438	\$ 17,199	\$ 18,845	\$ 19,749	\$ 19,862
Total Payroll taxes and benefits	\$	16,442,116	\$ 17,125,998	\$ 18,812,159	\$ 19,438,794	\$ 20,201,760
Cost per FTE	\$	75,770	\$ 81,943	\$ 81,438	\$ 82,718	\$ 84,881

The schedule above represents a count of the full-time employees as of the years ended March 31, 2013 through 2017. Part-time and seasonal employees are not included here. The Exhibit indicates that after a major staffing increase in 2015, the number of full-time employees remained steady until 2017.

Overall staffing increases were required for the expanded operations as new exhibits were added.

Exhibit 28

Salaries and Wages Per Admission					
	2013	2014	2015	2016	2017
Gate Attendance	1,395,717	1,502,095	1,505,395	1,629,477	1,631,866
Animal Care and Health	\$ 3.38	\$ 3.38	\$ 3.65	\$ 3.42	\$ 3.55
Horticulture	0.43	0.43	0.46	0.45	0.48
Membership and Park Operations	1.17	1.36	1.44	1.45	1.55
Facilities and External Properties	1.06	1.06	1.15	1.10	1.14
General & Administrative	0.86	0.73	0.84	0.65	0.61
Events and Group Functions	0.70	0.64	0.64	0.64	0.63
Education	0.74	0.57	0.58	0.53	0.62
CREW	0.49	0.45	0.45	0.47	0.52
Fundraising	0.39	0.39	0.39	0.37	0.38
Total Salaries and wages	\$ 9.22	\$ 9.01	\$ 9.60	\$ 9.08	\$ 9.48
Total Payroll taxes and benefits	\$ 2.56	\$ 2.39	\$ 2.89	\$ 2.85	\$ 2.90

Salaries and wages per admission have increased since 2013 with an overall increase during the period reviewed. The decreases in 2014 were driven primarily by increased admissions. The increased per admission costs in 2015 through 2017 can be tied to increased salaries and wages, which were partially offset by increases in attendance.

Summary Finding

Salaries, wages and employee benefits account for approximately 50% of the CZ&BG's operating expenses. From 2013 to 2017, these expenses increased by \$3.7 million. The increase is due to 3% annual union and non-union raises, merit raises, and the hiring of approximately 20 more full-time employees.

Review of Expenses by Department

The following exhibits group operating expenses by programs and supporting service areas. The purpose of this analysis is to understand trends and to identify any unusual or nonrecurring items. The expenses in the following exhibits do not include depreciation or interest expense.

Overall trends include increases in salary, wages, payroll taxes and benefits and operating supplies as well as a reclassification of maintenance and rent expenses. Of particular note is the utilities expense across all departments which have remained flat.

The largest increases of salary, wages, payroll taxes and benefits over the period in review comparing 2017 expenses to 2013 expenses occurred in the Membership and Park operation (13.3% increase totaling \$1,063,452), Horticulture (8.8% increase totaling 216,523), CREW (8.4% increase totaling 286,423), Facilities (7.8% increase totaling 596,204), and Animal Care (6.5% increase totaling 1,566,428). The increases directly correlate to increase in FTEs as seen in Exhibit 39 along with annual wage increases. Increases of operating supplies over the period have ranged from 30% increase to a 600% increase of expenses.

Other than the Facilities and External Properties department, maintenance and rent expense have reduced to a minimal level. This is largely due to a reclassification of expenses to the Facilities and External Properties department. Major maintenance is comprised mainly of expenses for improvements and replacements to the CZ&BG's infrastructure. These expenses are addressed in more detail within the capital expenditure section of this report.

Exhibit 29

Animal Care and Health Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 4,722,245	\$ 5,078,449	\$ 5,493,076	\$ 5,576,052	\$ 5,792,524
Payroll taxes and benefits	1,264,039	1,327,878	1,448,680	1,638,122	1,760,188
Animal food	1,047,589	1,105,731	1,007,534	1,035,081	946,262
Operating supplies	414,735	410,102	413,705	511,496	410,217
Education programs	-	-	-	-	-
Special project costs	11,604	24,469	20,000	24,408	84,736
Maintenance and rent	20,155	12,570	12,499	8,881	2,541
Utilities	725,708	726,295	685,735	689,222	733,975
Insurance	563,485	574,715	564,812	558,589	557,325
General expenses	125,447	210,497	216,211	264,370	228,562
	\$ 8,895,007	\$ 9,470,706	\$ 9,862,252	\$ 10,306,221	\$ 10,516,330
Percentage increase (decrease)	<u>4.2%</u>	<u>6.5%</u>	<u>4.1%</u>	<u>4.5%</u>	<u>2.0%</u>

Exhibit 30

<u>Horticulture Expense Analysis</u>					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 603,509	\$ 640,170	\$ 691,005	\$ 727,215	\$ 783,573
Payroll taxes and benefits	142,560	145,444	181,565	209,943	224,019
Operating supplies	176,819	179,360	141,067	148,431	227,822
Special project costs	-	-	-	746	2,141
Maintenance and rent	17,530	22,476	16,658	5,303	4,190
Utilities	11,527	12,431	11,628	11,796	11,601
Insurance	8,950	9,837	9,667	9,561	8,810
General expenses	27,722	34,205	27,920	30,317	29,808
	\$ 988,617	\$ 1,043,923	\$ 1,079,510	\$ 1,143,312	\$ 1,291,964
Percentage increase (decrease)	<u>10.5%</u>	<u>5.6%</u>	<u>3.4%</u>	<u>5.9%</u>	<u>13.0%</u>

Exhibit 31

<u>Membership and Park Operation Expense Analysis</u>					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 1,639,135	\$ 2,045,296	\$ 2,168,025	\$ 2,358,816	\$ 2,528,581
Payroll taxes and benefits	361,248	419,863	441,980	496,367	535,254
Operating supplies	304,376	403,849	352,998	808,139	796,910
Membership Services	162,590	200,815	183,805	195,771	105,053
Maintenance and rent	18,547	7,511	4,622	11,923	4,116
Utilities	136,148	187,165	175,076	177,610	185,619
Insurance	105,714	148,103	145,551	143,947	140,945
General expenses	809,301	819,935	834,878	424,797	485,061
	\$ 3,537,059	\$ 4,232,537	\$ 4,306,935	\$ 4,617,370	\$ 4,781,539
Percentage increase (decrease)	<u>1.0%</u>	<u>19.7%</u>	<u>1.8%</u>	<u>7.2%</u>	<u>3.6%</u>

Exhibit 32

<u>Facilities and External Properties Expense Analysis</u>					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 1,483,910	\$ 1,593,520	\$ 1,737,565	\$ 1,785,739	\$ 1,867,572
Payroll taxes and benefits	464,283	495,766	579,181	614,691	676,825
Operating supplies	522,826	1,607,669	1,177,031	663,593	682,203
Maintenance and rent	2,689,272	788,762	1,335,955	1,930,141	1,455,246
Utilities	33,708	29,432	124,768	27,931	27,470
Insurance	26,173	23,291	22,889	36,967	37,707
General expenses	11,459	20,231	20,600	23,401	32,831
	5,231,631	4,558,671	4,997,989	5,082,463	4,779,854
Percentage increase (decrease)	<u>127.3%</u>	<u>-12.9%</u>	<u>9.6%</u>	<u>1.7%</u>	<u>-6.0%</u>
Major Maintenance	-	-	-	-	-
Total	\$ 5,231,631	\$ 4,558,671	\$ 4,997,989	\$ 5,082,463	\$ 4,779,854
Percentage increase (decrease)	<u>21.6%</u>	<u>-12.9%</u>	<u>9.6%</u>	<u>1.7%</u>	<u>-6.0%</u>

The major maintenance category also covers expenses for external properties owned in Clermont and Warren counties. All expenses related to these external properties have additional department codes. The Exhibit below, which was provided by Management, presents a separate accounting of each external property's direct revenues and expenses.

Exhibit 33

Warren & Clermont County Financial Analysis				
	Warren County Farm (Bowyer/Bogen)		Clermont County Farm (Mast)	
	2017	2018	2017	2018
	Actual	Projected	Actual	Projected
Revenue:				
Farm Rent - Price	7,500	7,500	0	0
Farm Rent - Green Bean Delivery / Schappacher	5,000	5,000	0	0
Other Revenue (Grant noted below)	2,770 A	3,000	0	0
Total Revenue	15,270	15,500	0	0
Expense:				
Payroll & Benefits	15,687	16,000	83,918	86,500
Animal Food	0	0	50,000	50,000
Other Operating	11,725	12,000	5,642	6,000
Outside Services	5,305	5,000	4,459	5,000
Equipment Repair	0	0	2,365	2,500
Electric	105	100	4,745	5,000
Gas	0	0	4,633	5,000
Sewer & Water	199	200	1,552	2,000
Property Taxes	20,985 B	21,000	0	0
Total Expense	54,006	54,300	157,312	162,000
Total Operating Loss	(38,736)	(38,800)	(157,312)	(162,000)
A: CZ&BG has returned part of the land at Bogen/Bowyer into a native wetlands via a grant and receives a small amount of revenue related to this annually.				
B: CZ&BG has obtained a CAUV exemption on the property.				

It should be noted that not all expenses related to animal breeding programs conducted at the Mast Farm are included within the analysis above.

Exhibit 34

General & Administrative Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 1,204,873	\$ 1,091,876	\$ 1,261,554	\$ 1,062,310	\$ 993,353
Payroll taxes and benefits	492,984	388,991	834,411	745,462	498,803
Operating supplies	618,820	482,161	753,198	618,805	1,066,856
Professional services	194,699	192,358	247,927	254,603	234,691
Maintenance and rent	1,713	1,177	617	79	-
Utilities	40,481	35,008	32,747	33,222	40,167
Insurance	31,431	27,701	27,225	12,595	13,652
General expenses	530,971	589,681	577,021	751,180	726,185
	\$ 3,115,972	\$ 2,808,953	\$ 3,734,700	\$ 3,478,256	\$ 3,573,707
Percentage increase (decrease)	<u>-5.5%</u>	<u>-9.9%</u>	<u>33.0%</u>	<u>-6.9%</u>	<u>2.7%</u>

Exhibit 35

Events and Group Functions Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 974,339	\$ 967,454	\$ 969,164	\$ 1,037,250	\$ 1,024,362
Payroll taxes and benefits	268,432	259,189	276,461	289,716	312,345
Operating supplies	694,033	761,660	873,207	949,074	926,352
Outreach	986,411	902,512	899,063	832,215	856,403
Group sales	1,325,794	1,324,089	1,286,868	1,631,067	1,225,014
Education programs	-	-	1,443	-	-
Special project costs	-	-	-	12,204	-
Maintenance and rent	734	490	1,351	-	-
Utilities	87,204	79,450	74,319	75,396	94,088
Insurance	67,710	62,869	61,785	61,103	71,443
General expenses	68,824	74,698	80,259	98,016	92,501
	\$ 4,473,481	\$ 4,432,411	\$ 4,523,920	\$ 4,986,041	\$ 4,602,508
Percentage increase (decrease)	<u>9.3%</u>	<u>-0.9%</u>	<u>2.1%</u>	<u>10.2%</u>	<u>-7.7%</u>

Exhibit 36

Education Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 1,028,306	\$ 854,613	\$ 874,961	\$ 869,432	\$ 1,008,960
Payroll taxes and benefits	244,778	226,474	230,406	247,634	257,405
Operating supplies	123,157	29,527	24,315	34,062	60,984
Outreach	-	-	-	-	-
Education programs	92,562	103,347	103,432	95,597	92,678
Special project costs	5,000	6,846	-	-	-
Maintenance and rent	-	-	138	-	96
Utilities	105,852	127,649	119,404	121,133	119,134
Insurance	82,191	101,008	99,267	98,174	90,462
General expenses	76,274	84,209	91,254	85,712	105,603
	\$ 1,758,120	\$ 1,533,673	\$ 1,543,177	\$ 1,551,744	\$ 1,735,322
Percentage increase (decrease)	<u>-17.1%</u>	<u>-12.8%</u>	<u>0.6%</u>	<u>0.6%</u>	<u>11.8%</u>

Exhibit 37

Crew Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 679,968	\$ 673,149	\$ 681,973	\$ 772,399	\$ 848,615
Payroll taxes and benefits	169,747	162,756	180,752	228,394	287,523
Operating supplies	114,871	113,949	162,220	177,723	189,648
Special project costs	55,123	65,746	77,173	54,625	66,979
Maintenance and rent	8,697	5,418	7,358	14,508	12,594
Utilities	52,124	56,214	52,583	53,344	45,846
Insurance	40,473	44,482	43,715	43,234	34,812
General expenses	51,115	24,814	19,252	33,013	26,894
	\$ 1,172,118	\$ 1,146,528	\$ 1,225,026	\$ 1,377,240	\$ 1,512,911
Percentage increase (decrease)	<u>-7.8%</u>	<u>-2.2%</u>	<u>6.8%</u>	<u>12.4%</u>	<u>9.9%</u>

Exhibit 38

Fundraising Expense Analysis					
	2013	2014	2015	2016	2017
Salaries and wages	\$ 538,677	\$ 586,881	\$ 581,583	\$ 608,673	\$ 627,066
Payroll taxes and benefits	159,083	168,229	179,817	170,579	174,792
Operating supplies	118,413	142,926	58,801	71,831	130,510
Outreach	-	-	-	-	-
Special project costs	558	200	200	200	250
Professional services	42,480	89,926	90,649	103,200	109,204
Maintenance and rent	457	207	-	-	-
Utilities	12,818	13,824	12,930	13,117	12,902
Insurance	9,953	10,938	10,750	10,632	9,796
General expenses	77,274	219,077	95,684	93,118	101,729
	\$ 959,713	\$ 1,232,208	\$ 1,030,414	\$ 1,071,350	\$ 1,166,249
Percentage increase (decrease)	<u>3.8%</u>	<u>28.4%</u>	<u>-16.4%</u>	<u>4.0%</u>	<u>8.9%</u>

Summary Finding

During the period in review, CZ&BG experienced growth with a number of major capital projects. Those projects resulted in a need for added expenses and increased attendance. However, in order to manage both the additional and expanded exhibits, a significant number of employees were added. More employees were not only needed for animal care, but also maintenance of the facility systems. Membership and park operations added FTEs to manage the stresses of the increased attendance whether it be parking, trash removal or first aid. During this period of growth, utilities expense has remained flat due to CZ&BG's efforts to find more economical and sustainable options related to their utility usage.

Interest and Depreciation

Over the period studied, long-term financing supplied by commercial banks and through the purchase of bonds has provided funds for a variety of projects and upgrades. The following Exhibit breaks out interest expense by department. In addition, it reports the average balance of interest-bearing debt and interest as a percentage of average debt.

Exhibit 39

Interest Expense by Operating Category Analysis					
	2013	2014	2015	2016	2017
Animal Care and Health	\$ 213,517	\$ 224,905	\$ 108,128	\$ 188,344	\$ 180,067
Horticulture	3,392	3,849	1,850	3,224	2,846
Membership and Park Operations	40,057	57,958	27,864	48,535	45,538
Facilities and External Properties	9,917	9,114	4,382	7,632	6,739
General & Administrative	22,648	17,686	213,462	9,078	9,670
Events and Group Functions	25,657	24,602	11,829	20,605	23,083
Education	31,144	39,528	19,004	33,102	29,228
Crew	15,336	17,408	8,369	14,577	11,247
Fundraising	3,772	4,280	2,058	3,584	3,165
Total interest	365,440	399,330	396,946	328,681	311,583
Average balance interest bearing debt	\$ 13,834,800	\$ 16,259,600	\$ 17,714,300	\$ 14,851,800	\$ 12,085,500
Interest as a percentage of average debt	<u>2.6%</u>	<u>2.5%</u>	<u>2.2%</u>	<u>2.2%</u>	<u>2.6%</u>

This analysis indicates that interest expense has remained constant over the last five years.

Depreciation:

Capital assets consisting of buildings, indoor and outdoor displays, equipment, furniture and fixtures are generally paid for through capital campaigns, donor gifts, estate bequests, grants and government funding. The following schedule summarizes the depreciation of capital assets by operating category.

Exhibit 40

Depreciation by Operating Category					
	2013	2014	2015	2016	2017
Animal Care and Health	\$ 2,822,597	\$ 2,940,343	\$ 3,298,403	\$ 3,545,457	\$ 3,615,655
Horticulture	44,833	50,326	56,455	60,683	57,153
Membership and Park Operations	529,539	757,719	849,990	913,656	914,385
Facilities and External Properties	131,104	142,235	224,052	143,682	135,323
General & Administrative	157,448	141,728	104,336	57,437	197,866
Events and Group Functions	339,174	321,647	360,815	387,840	463,487
Education	411,709	516,775	579,705	623,126	586,873
Crew	202,736	227,577	255,290	274,412	225,843
Fundraising	49,854	55,963	62,778	67,480	63,554
	\$ 4,688,994	\$ 5,154,313	\$ 5,791,824	\$ 6,073,773	\$ 6,260,139
Average Remaining Depreciable Life	<u>9.94</u>	<u>9.68</u>	<u>9.70</u>	<u>9.89</u>	<u>9.69</u>
<i>(Average net book value less land/Depreciation)</i>					

The CZ&BG depreciates buildings and displays over 10 to 20 years. Other equipment and furniture are assigned depreciable lives of three to ten years. The CZ&BG's estimated lives appear conservative.

Five-year Revenue and Expenditure Projection for the Upcoming Levy Period

This section includes a five-year revenue and expense projection calculated according to the following different scenarios.

For each scenario we used the following assumptions based on discussion and input from the CZ&BG. Flat but stable attendance of 1.6 million is forecasted. Operating revenues associated with gate attendance will have annual increases of 3%. Unrestricted gifts, designated gifts and sponsorships will be in line with trailing 5-year averages, also inflated by 3%. Operating expenses will grow by 3.5%. Debt service and endowment transfers were provided by the CZ&BG. We believe all assumptions are conservative and reasonable.

Exhibit 41

Scenario 1: Zero Levy Increase

With Zero Increase for Inflation	12-months ended 3/31/2017	CZ&BG Projected 12-months ended 3/31/2018	ATTENDANCE STABLE AT 1.6 MILLION INFLATION - 3% REVENUE 3.5% EXPENSE PROJECTED FISCAL YEARS ENDED				
			3/31/2019	3/31/2020	3/31/2021	3/31/2022	3/31/2023
Attendance	<u>1,631,866</u>	<u>1,800,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>
Operating Revenues							
Admissions	9,125,968	10,200,000	9,493,000	9,778,000	10,071,000	10,373,000	10,684,000
Memberships	9,249,136	9,900,000	9,621,000	9,910,000	10,207,000	10,513,000	10,828,000
Attractions	1,643,794	1,800,000	1,710,000	1,761,000	1,814,000	1,868,000	1,924,000
Parking	1,420,934	1,600,000	1,478,000	1,522,000	1,568,000	1,615,000	1,663,000
Programs	1,461,031	1,500,000	1,520,000	1,566,000	1,613,000	1,661,000	1,711,000
Commissions (food & gift shop)	2,085,859	2,500,000	2,170,000	2,235,000	2,302,000	2,371,000	2,442,000
Rental income	242,917	200,000	200,000	200,000	200,000	200,000	200,000
Other income	616,648	750,000	641,000	660,000	680,000	700,000	721,000
Unrestricted Gifts	1,056,581	1,000,000	1,030,000	1,061,000	1,093,000	1,126,000	1,160,000
Designated Gifts	2,026,559	1,500,000	1,545,000	1,591,000	1,639,000	1,688,000	1,739,000
Grants	446,336	500,000	515,000	530,000	546,000	562,000	579,000
Sponsorships (Marketing & Events)	2,451,376	2,000,000	2,060,000	2,122,000	2,186,000	2,252,000	2,320,000
Tax Levy	<u>6,550,000</u>	<u>6,550,000</u>	<u>6,332,000</u>	<u>6,332,000</u>	<u>6,332,000</u>	<u>6,332,000</u>	<u>6,332,000</u>
	<u>38,377,139</u>	<u>40,000,000</u>	<u>38,315,000</u>	<u>39,268,000</u>	<u>40,251,000</u>	<u>41,261,000</u>	<u>42,303,000</u>
Operating Expenses	<u>33,960,384</u>	<u>35,000,000</u>	<u>36,225,000</u>	<u>37,493,000</u>	<u>38,805,000</u>	<u>40,163,000</u>	<u>41,569,000</u>
Operating income (loss)	4,416,755	5,000,000	2,090,000	1,775,000	1,446,000	1,098,000	734,000
Adjustments							
Investment income - operations	34,708	-	-	-	-	-	-
Debt Service - Interest	(311,583)	(274,000)	(195,000)	(152,000)	(110,000)	(67,000)	(25,000)
Debt Service - Principal (a)	(2,890,000)	(930,000)	(1,410,000)	(1,420,000)	(1,415,000)	(1,295,000)	(940,000)
Endowment transfers to operations	1,393,329	805,000	800,000	800,000	800,000	800,000	800,000
Cash flow before unfunded capital reinvestment (b)	<u>\$2,643,209</u>	<u>\$4,601,000</u>	<u>\$ 1,285,000</u>	<u>\$ 1,003,000</u>	<u>\$ 721,000</u>	<u>\$ 536,000</u>	<u>\$ 569,000</u>
(a) Debt service to be paid from operating funds							
(b) The CZ&BG estimates that \$2.5 million is needed annually to pay for unfunded capital reinvestment.							

Exhibit 42

Scenario 2: Five Years of Inflation, 2014 Base

Five Year Projected operating income and cash flows Levy with 5-Year inflation							
	12-months ended 3/31/2017	CZ&BG Projected 12-months ended 3/31/2018	3/31/2019	ATTENDANCE STABLE AT 1.6 MILLION INFLATION - 3% REVENUE 3.5% EXPENSE PROJECTED FISCAL YEARS ENDED			
			3/31/2019	3/31/2020	3/31/2021	3/31/2022	3/31/2023
Attendance	<u>1,631,866</u>	<u>1,800,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>
Operating Revenues							
Admissions	9,125,968	10,200,000	9,493,000	9,778,000	10,071,000	10,373,000	10,684,000
Memberships	9,249,136	9,900,000	9,621,000	9,910,000	10,207,000	10,513,000	10,828,000
Attractions	1,643,794	1,800,000	1,710,000	1,761,000	1,814,000	1,868,000	1,924,000
Parking	1,420,934	1,600,000	1,478,000	1,522,000	1,568,000	1,615,000	1,663,000
Programs	1,461,031	1,500,000	1,520,000	1,566,000	1,613,000	1,661,000	1,711,000
Commissions (food & gift shop)	2,085,859	2,500,000	2,170,000	2,235,000	2,302,000	2,371,000	2,442,000
Rental income	242,917	200,000	200,000	200,000	200,000	200,000	200,000
Other income	616,648	750,000	641,000	660,000	680,000	700,000	721,000
Unrestricted Gifts	1,056,581	1,000,000	1,030,000	1,061,000	1,093,000	1,126,000	1,160,000
Designated Gifts	2,026,559	1,500,000	1,545,000	1,591,000	1,639,000	1,688,000	1,739,000
Grants	446,336	500,000	515,000	530,000	546,000	562,000	579,000
Sponsorships (Marketing & Events)	2,451,376	2,000,000	2,060,000	2,122,000	2,186,000	2,252,000	2,320,000
Tax Levy	6,550,000	6,550,000	6,859,000	6,859,000	6,859,000	6,859,000	6,859,000
	<u>38,377,139</u>	<u>40,000,000</u>	<u>38,842,000</u>	<u>39,795,000</u>	<u>40,778,000</u>	<u>41,788,000</u>	<u>42,830,000</u>
Operating Expenses	<u>33,960,384</u>	<u>35,000,000</u>	<u>36,225,000</u>	<u>37,493,000</u>	<u>38,805,000</u>	<u>40,163,000</u>	<u>41,569,000</u>
Operating income (loss)	<u>4,416,755</u>	<u>5,000,000</u>	<u>2,617,000</u>	<u>2,302,000</u>	<u>1,973,000</u>	<u>1,625,000</u>	<u>1,261,000</u>
Adjustments							
Investment income - operations	34,708	-	-	-	-	-	-
Debt Service - Interest	(311,583)	(274,000)	(195,000)	(152,000)	(110,000)	(67,000)	(25,000)
Debt Service - Principal (a)	(2,890,000)	(930,000)	(1,410,000)	(1,420,000)	(1,415,000)	(1,295,000)	(940,000)
Endowment transfers to operations	1,393,329	805,000	800,000	800,000	800,000	800,000	800,000
Cash flow before unfunded capital reinvestment (b)	<u>\$2,643,209</u>	<u>\$4,601,000</u>	<u>\$ 1,812,000</u>	<u>\$ 1,530,000</u>	<u>\$ 1,248,000</u>	<u>\$ 1,063,000</u>	<u>\$ 1,096,000</u>
(a) Debt service to be paid from operating funds							
(b) The CZ&BG estimates that \$2.5 million is needed annually to pay for unfunded capital reinvestment.							

Exhibit 43

Scenario 3: Ten Years of Inflation, 2009 Base

Five Year Projected operating income and cash flows Levy with 10-Year inflation							
	12-months ended 3/31/2017	CZ&BG Projected 12-months ended 3/31/2018	3/31/2019	3/31/2020	3/31/2021	3/31/2022	3/31/2023
Attendance	1,631,866	1,800,000	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
Operating Revenues							
Admissions	9,125,968	10,200,000	9,493,000	9,778,000	10,071,000	10,373,000	10,684,000
Memberships	9,249,136	9,900,000	9,621,000	9,910,000	10,207,000	10,513,000	10,828,000
Attractions	1,643,794	1,800,000	1,710,000	1,761,000	1,814,000	1,868,000	1,924,000
Parking	1,420,934	1,600,000	1,478,000	1,522,000	1,568,000	1,615,000	1,663,000
Programs	1,461,031	1,500,000	1,520,000	1,566,000	1,613,000	1,661,000	1,711,000
Commissions (food & gift shop)	2,085,859	2,500,000	2,170,000	2,235,000	2,302,000	2,371,000	2,442,000
Rental income	242,917	200,000	200,000	200,000	200,000	200,000	200,000
Other income	616,648	750,000	641,000	660,000	680,000	700,000	721,000
Unrestricted Gifts	1,056,581	1,000,000	1,030,000	1,061,000	1,093,000	1,126,000	1,160,000
Designated Gifts	2,026,559	1,500,000	1,545,000	1,591,000	1,639,000	1,688,000	1,739,000
Grants	446,336	500,000	515,000	530,000	546,000	562,000	579,000
Sponsorships (Marketing & Events)	2,451,376	2,000,000	2,060,000	2,122,000	2,186,000	2,252,000	2,320,000
Tax Levy	6,550,000	6,550,000	8,467,000	8,467,000	8,467,000	8,467,000	8,467,000
	38,377,139	40,000,000	40,450,000	41,403,000	42,386,000	43,396,000	44,438,000
Operating Expenses	33,960,384	35,000,000	36,225,000	37,493,000	38,805,000	40,163,000	41,569,000
Operating income (loss)	4,416,755	5,000,000	4,225,000	3,910,000	3,581,000	3,233,000	2,869,000
Adjustments							
Investment income - operations	34,708	-	-	-	-	-	-
Debt Service - Interest	(311,583)	(274,000)	(195,000)	(152,000)	(110,000)	(67,000)	(25,000)
Debt Service - Principal (a)	(2,890,000)	(930,000)	(1,410,000)	(1,420,000)	(1,415,000)	(1,295,000)	(940,000)
Endowment transfers to operations	1,393,329	805,000	800,000	800,000	800,000	800,000	800,000
Cash flow before unfunded capital reinvestment	\$2,643,209	\$4,601,000	\$ 3,420,000	\$ 3,138,000	\$ 2,856,000	\$ 2,671,000	\$ 2,704,000
(a) Debt service to be paid from operating funds							
(b) The CZ&BG estimates that \$2.5 million is needed annually to pay for unfunded capital reinvestment.							

Summary Finding

Preliminary forecasts indicate that if attendance stabilizes at 1.6 million visitors and the current levy is renewed without a increase, the CZ&BG cash flows may remain positive but could decrease below the level required to fund capital reinvestment. Increasing the levy for inflation using a 5-year schedule partially mediates this result and increasing the levy for inflation using a 10-year schedule fully restores the CZ&BG's ability to self-fund capital reinvestment.

VII. Operations Analysis

The Operations Analysis Section addresses the topics of Effectiveness of Strategic Planning, Review of Insurance Coverage, and Review of Major Contracts.

Effectiveness of Strategic Planning

We have reviewed the effectiveness of the CZ&BG's recent strategic planning with reference to five key factors: Internal Strengths, Stakeholder Perception, Customer Satisfaction, Health, Safety and Environment and Economic Impact to the Region.

1. Internal strengths

- a. Flexibility:
The CZ&BG demonstrated flexibility during the most recent levy cycle by accomplishing a structural reorganization to increase efficiency.
- b. Strategic value:
The CZ&BG has been able to increase its strategic value by introducing new exhibits, renovating older exhibits, and further developing community relationships with Hamilton County, the Greater Cincinnati area, the community of Avondale, the UpTown Cincinnati development project, as well as with local neighbors, such as the Cincinnati Children's Hospital, the University of Cincinnati, and the Veteran's Administration Clinic of Cincinnati.
- c. Learning:
The CZ&BG emphasizes the value of learning for both its employees and its customers. All employees are encouraged to expand their job knowledge and professional expertise. Visitors to the CZ&BG are entertained and educated by the staff of CREW, CZ&BG's staff and caretakers, and CZ&BG's volunteers. The Cincinnati Zoo Academy of the Hughes High School provides zoological and botanical education to local students. Additionally, CREW provides post-doctoral training for veterinarians.

2. Stakeholder perception

- a. Local government:
The CZ&BG has established and continues to nurture positive local government relations with Hamilton County, the City of Cincinnati, local neighborhoods, and with the visitor bases of Ohio, Northern Kentucky, and Southeast Indiana.
- b. Press coverage:
The CZ&BG activity promotes a positive image through all forms of media, including press, television, radio, and social media channels. The Executive Director, members of CREW, and animal caretakers are interviewed regularly on local television and radio stations. Members of the CZ&BG staff speak on a regular basis with community, school, church, and social clubs.
- c. Employee satisfaction:
The CZ&BG employees and volunteers enjoy a pleasant, yet challenging work environment. The level of employee satisfaction is demonstrated by the low level of employee turnover and the longevity of volunteer relationships.

3. Customer satisfaction

a. Product quality:

CZ&BG is accredited by the Association of Zoos and Aquariums (AZA) and the Botanical Gardens are accredited by the American Alliance of Museums (AAM). AAA rates the CZ&BG as a "Gem" of an attraction. Negative feedback from these reviewers tends to focus on the quality of parking facilities and on difficulties in finding the CZ&BG. TripAdvisor ranks the CZ&BG as the #2 out of 189 top attractions in the Cincinnati Area, surpassed only by the Cincinnati Reds Great American Ballpark. Individual consumer rankings on the Trip Advisor website are very favorable with over 3,000 reviews and an average rating of 4.5 out of 5.0. In most instances as being either "Excellent" or "Very Good"

b. Customer service:

Our research on product quality, summarized above, also indicates that overall customer service at the CZ&BG is "very good to excellent." Comments suggest the staff is helpful and friendly, the CZ&BG's grounds are well-maintained and clean, and the animals appear to be well cared for and comfortable in their habitats. Negative comments are related primarily to parking and the cost of concessionaire food and beverage services.

c. Repeat customers:

The best source of data relative to repeat customers is the high level of membership renewals by the CZ&BG members. Renewal over the past four years averages in the high 50 percentile bracket, a strong sign the CZ&BG provides a very positive experience to its patrons. Over the same period, high-end Gold memberships increased from 34,000 to 42,000, an increase of almost 24%.

4. Health, safety, and environment

a. Public health and safety:

The CZ&BG meets all public health and safety requirements of the AZA, USDA, ADA and AAM.

b. Worker health and safety:

The CZ&BG meets all worker health and safety requirements of the AZA, USDA, ADA and AAM.

c. Environmental impact:

The CZ&BG has been effective in reducing its environmental footprint over the period of the current levy. The use of water has been significantly reduced and has resulted in lower operating costs. Electrical costs have been reduced by the implementation of a solar panel joint venture project which provides the added benefit of shaded parking areas.

5. Economic impact on the region

A 2013 analysis by the University of Cincinnati Economic Center indicated the CZ&BG added a \$143 million stimulus to the Greater Cincinnati area local economy in that year. This impressive positive effect included an individual household earnings impact of \$51.7 million. The report went on to note the CZ&BG's presence in the Greater Cincinnati area created or retained over 1,700 jobs.

According to the report, these economic activities generated nearly \$1.74 million annually in local sales, hotel, and property tax revenue.

When the total economic impact of \$143 million is compared with the CZ&BG's spending of \$37.1 million for operations and construction, it results in an overall economic multiplier of 3.9, a number which very few local enterprises can match.

The final version of this report estimates the total economic impact of the CZ&BG at \$143 million and specifies the household earnings impact within that total at \$51.7 million. It finds the CZ&BG's total employment impact in Greater Cincinnati is over 1,700 jobs, and the Zoo even functions as a recruitment tool in the medical field. Within the report, the Executive VP/COO of Cincinnati Children's Hospital Medical Center, Scott Hamlin, is quoted as saying, "because of its outstanding quality, the CZ&BG is a featured item in Children's Hospital Medical Center's talent attraction efforts. It helps us tell a very positive story about Cincinnati."

As a major Cincinnati attraction, the CZ&BG brings in 288,000 non-local visitors who generate millions of dollars in off-site spending on food and drink, hotels, shopping, and entertainment.

Based upon the findings of the 2013 economic impact analyses, it appears the CZ&BG has had a very favorable economic impact on the Greater Cincinnati region.

Review of Past Accreditation Reviews and CZ&BG Responses

Overview

The Zoo and Aquarium facilities of the CZ&BG are subject to accreditation by the Association of Zoos and Aquariums (AZA). The Botanical Gardens of the CZ&BG are subject to accreditation by the American Alliance of Museums (AAM).

Latest AZA Accreditation Inspection: June 9-11, 2014

AZA accreditation reviews take place every five years

- *Note: AZA Concerns and CZ&BG Responses relative to the Accreditation Report have been condensed.*

The AZA sent an accreditation certificate, dated September 14, 2014, to the CZ&BG which documented the extension of accreditation through September 30, 2019.

Concerns Remaining From Previous Inspection

AZA comment in the current Inspection report indicated that there were no unresolved concerns.

Concerns From the Most Current Inspection

The AZA Inspection Report detailed four Major Concerns and five Lesser Concerns. This is commendable given the fact that the Accreditation Inspection Checklist contains over 300 items. The previous Inspection Report detailed four Major Concerns and eight Lesser Concerns.

Major Concerns are documented in Full and Lesser Concerns and their disposition are commented upon. Detail of Concerns or lack thereof, by Inspection Report topic area, follows:

General Information – 11 Checklist items: No Concerns noted.

Animal Care, Welfare, & Management – 53 – Checklist items: Two Major Concerns and one Lesser Concern.

Major Concern:

- The CZ&BG's elephant facilities were found not to be in compliance with AZA's Standards with respect to barriers.

The CZ&BG Response: Revisions to remediate the elephant containment site will be completed by March 1, 2015. The revisions will not be completed prior to the September 1, 2014 deadline; therefore, a variance from Inspection Concern was requested. The response included a site plan of the elephant containment area including remediation features and improvements.

HW&Co. Follow-up: The concern was remediated during 2016 per Mark Fisher

- The CZ&BG's Elephant Management Protocol was found not to be in compliance with portions of the AZA's Standards with respect to elephant safety policy.

The CZ&BG Response: The Elephant Management Protocol will be updated to bring it into compliance with AZA Standards. The revisions will not be completed prior to the September 1, 2014 deadline; therefore, a variance from Inspection Concern was requested. The response included updated Elephant Restricted Training Contact Checklists for each individual elephant.

HW&Co. Follow-up: The concern was remediated during 2016 per Mark Fisher

HW&CO comment: Elephants are one of the largest, intelligent and dangerous animals held in captivity. The AZA recognizes these circumstances and; therefore, their elephant management policies are updated on a frequent basis.

Lesser Concern: Peeling paint was noted in the bird house and peeling paint and rusting metal were noted in the Siberian Lynx exhibit. The CZ&BG remediated these matters and provided commentary and photos in its response.

Veterinary Care – 28 Checklist items: One Lesser Concern noted.

Lesser Concern: The use of human food refrigerators and coffee pots in the commissary food prep area and lack of cleanliness of the facility were noted. The CZ&BG remediated these matters and provided commentary and photos in its response.

Conservation – 13 Checklist items: No Concerns noted.

Education and Interpretation – 13 Checklist items: No Concerns noted.

Research – Nine Checklist items: No Concerns noted.

Governing Authority – 15 Checklist items: No Concerns noted.

Staff(s) – 20 Checklist items: No Concerns noted.

Support Organization – 15 Checklist items: No Concerns noted relative to the Cincinnati Zoo Foundation

Finance – 12 Checklist items: No Concerns noted.

Physical Facilities – 20 Checklist items: One Major Concern and two Lesser Concerns.

Major Concern:

- The CZ&BG's otter exhibit did not have a visible ozone indicator. The lack of such could impair animal and human safety.

The CZ&BG Response: This matter was remediated and commentary and photos were provided in its response.

Lesser Concern: Several permanent extension cords were in place in the red panda exhibit. The CZ&BG remediated this matter by installing new electrical receptacles in the exhibit. Commentary and photos were included in the CZ&BG response.

Lesser Concern: Bathroom cleanliness was questionable (untidy and out-of-order stalls). Recently cleaned restrooms had standing water left over from cleaning and no caution signs. The CZ&BG's Park Services team implemented a formalized plan to continually monitor the cleanliness of the Zoo's bathroom facilities. A clipboard and checklist system (similar to the ones used in airports) was developed. The checklist requires staff initials and the checklist will be monitored by managers. A copy of the checklist and commentary were included in the response.

Safety and Security – 63 Checklist items: One Major Concern noted.

- Despite a State two-person rule, single staff members enter cheetah enclosures at the farm. Also, at the farm, single staff members enter the male Grevy's zebra enclosure. It is important to note that there is only one staff person on site at the farm per day. At the Zoo, single staff members enter dangerous animal enclosures, including giraffe and Japanese macaque. There are no risk management plans for the aforementioned species.

The CZ&BG Response: The Director of Animal Collection along with the Curator of Mammals – Africa & the Curator of Primates have updated protocols and procedures regarding the animals noted during the AZA inspection. Additionally, the Director of Animal Collections will be working with curatorial staff to update risk assessment for any potentially dangerous animals. Updated documentation was included as exhibits to the response.

Guest Services – 22 Checklist items: No concerns noted, however, note the second Lesser Concern under the topic of Physical Facilities.

Other Programs / Activities – Four Checklist items: No Concerns noted.

Miscellaneous – Six Checklist items: No Concerns noted.

Points of Particular Achievement Noted by the Visiting Committee:

During the inspection, the Visiting Committee was particularly impressed with:

- The landscaping and botanical collection are outstanding
- The insectarium is a phenomenal exhibit and a true asset to the collection at the zoo
- The entire staff and all of the volunteers were extremely welcoming and friendly
- The interpretive program and staff are to be commended
- The green practices the Zoo has implemented over the past several years are inspiring and should be commended

Also, the inspection team was very impressed with organization, openness and degree of cooperation exhibited by the management team, board members, staff and volunteers during the inspection.

HW&Co. Conclusion:

Overall, the AZA Inspection Report is favorable. The Major and Lesser Concerns were remediated in a professional, timely and comprehensive manner.

Latest AAM Accreditation: March 27-29, 2008

AAM accreditation reviews take place every 10 years. The next review will take place in 2018.

On July 25, 2008, the AAM's Accreditation Committee renewed the Botanical Garden's accreditation status. The Committee sent a letter dated August 13, 2008 to the CZ&BG congratulating it for its achievement. Also included with the letter were materials to be used in promoting the CZ&BG's AAM accreditation award and status.

- *Note: Comments and Responses relative to the Accreditation Report have been condensed*

Preservation and Conservation**Living Collections**

The AAM Accreditation Team was impressed by the knowledge and dedication of management, staff, and the Board of the CZ&BG.

Commendations for the Botanical Gardens and Horticultural Exhibits include:

- Excellent job in enhancing the Botanical Gardens
- The Zoo Blooms Program
- The plant inventory system
- Numerous tropical garden displays

Commendations for facilities' efforts since the last visit are summarized as follows:

- Well-planned animal hospital
- Model LEED-certified education center
- New entertaining "4-D" theater
- Excellent renovation of the elephant exhibit
- Well-maintained CREW facility

- New Manatee Springs Exhibit
- Polar Bear Exhibit expansion and renovation
- Giraffe Exhibit expansion and enhancement – in process

Areas of concern which require attention were noted as follows:

- Ozone management facilities pertaining to aquatic systems
- Service access to the Japanese Snow Macaque exhibit

Non-Living Collections: Passenger Pigeon Memorial, sculptures and artifacts

Management of these collections were found to be adequate.

Research: Primarily CREW

Funding for CREW was found to be highly self-sufficient with only nominal reliance on the CZ&BG general funds. The Accreditation Team commented that “The work at Crew not only benefits the CZ&BG, but it also benefits the global Zoo and Botanical Garden profession through their pioneering work.”

Interpretation and Presentation

The CZ&BG’s numerous educational and interpretive programs were highly commended, including:

- The Zoo Academy: magnet school
- The Barrow Conservation Lecture Series
- Discovery programs for children
- Staff engagement with visitors
- Use of volunteer educators

There was minor criticism of some exhibit signage and some older presentations.

Overall, the conclusion on Interpretation and Presentation Efforts was that these aspects of the CZ&BG were "outstanding."

Administration and Finance

The Accreditation Committee Report made many favorable comments relative to:

- Key individual management member
- The volunteers
- Financial management of the CZ&BG
- Development office activities
- Facilities and site management
- Risk/safety management

In summary, the Accreditation Committee praised the CZ&BG for its fine operations and for its readiness to address concerns noted in the Committee's June 18-20, 1997 Accreditation Review.

Review of Insurance Coverage

Our review of the insurance coverage of the CZ&BG concludes that levels of General Liability, Umbrella Liability and Crime Insurance appear to be adequate to protect the CZ&BG, its employees and volunteers, including Trustees, from most liability claims. We would recommend the CZ&BG consider obtaining extortion coverage for key employees if the cost of such coverage is reasonable in relation to the risk that extortion represents to the viability of the CZ&BG.

The leadership of the CZ&BG appears to be acting prudently in its insurance planning and outlook. We recommend that the CZ&BG management review the levels of coverage and deductibles with its insurance broker(s) whenever the policies are renewed or whenever there are significant operational changes and/or changes in the risk environment.

Review of Major Contracts

We identified six major contracts and/or agreements impacting current and future operations of the CZ&BG. They include:

1. The Tax Levy agreement with Hamilton County
2. A contract with the City of Cincinnati covering the management of real and personal property
3. A contract with AFSCME/AFL-CIO Ohio Council 8 (the Union contract)
4. A concessionaire agreement with Service Systems Associates, Inc.
5. A contract with Iwerks Entertainment, Inc. to provide and maintain the CZ&BG's "4-D" cinema attraction
6. A solar power purchase agreement with CZ Solar, LLC

An analysis of each contract follows. Special attention will be given to the Tax Levy contract and to the solar power purchase agreement. References to the parties in the following analyses vary depending upon the language used in the specific contract. That is, if a contract refers to CZ&BG as "the Zoo", we will do so as well. By contrast, if a contract uses the term "the Zoo Society", we use that term in our analysis.

1. The Tax Levy Contract with Hamilton County

On October 15, 2016, the Board of County Commissioners (the County) entered into an agreement with the Zoological Society (the Zoo) to enact a five-year tax levy totaling .46 mills. The agreement, formally titled The Memorandum of Agreement between the Board of County Commissioners of Hamilton County, Ohio and the Zoological Society of Cincinnati, was pursuant to Hamilton County voter approval on November 5, 2014. The purpose of the Zoo Levy is to provide or maintain zoological park services and facilities. The contract stipulates that the tax is to be levied on 2014, 2015, 2016, 2017, and 2018 tax duplicates. Beginning on January 1, 2014, its term extends through December 31, 2018.

The Agreement's "Scope of Services" specifies that Levy proceeds "shall only be used for direct costs of operating the Zoo in one or more of the following categories." The categories stipulated in the Levy contract are also referred to as "Qualifying Area Expenditures" and include:

- Animal care
- Animal Health
- Environmental Services
- Horticulture
- Major Maintenance

For purposes of the Tax Levy agreement, "direct costs are those expenses that have a direct benefit and are directly attributable to one or more of the above categories." According to the agreement, such costs are to be clearly distinguished from indirect costs. The contract stipulates that "in no event can Levy proceeds be utilized for indirect costs incurred for a common or joint purpose and therefore are not readily attributable to one of the above categories."

This general statement of the separation of direct from indirect costs, and the Levy's funding of only the former, is followed, later in the agreement, with statements that could be seen to dilute its meaning. To wit, in Section 7 of the contract, "proceeds of the levy" are characterized as "the payer of last resort," a much more general description of what the levy is intended for. Language later in Section 7 reads, "specifically, the Zoo agrees that on an annual basis it will dedicate to the payment of Qualifying Area Expenditures no less than 30% of the actual cost of those Qualifying Area Expenditures."

Exhibit 44

ZOOLOGICAL SOCIETY OF CINCINNATI AND CINCINNATI ZOO FOUNDATION, INC.						
Qualifying Area Expenditures Paid By Levy vs. Internally Funded						
Description	Fiscal 2013	Fiscal 2014	Fiscal 2015	Fiscal 2016	Fiscal 2017	Five Year Average
Animal Care & Health	7,094,790	7,587,141	8,043,730	8,460,798	8,607,639	\$ 7,958,820
Horticulture	939,598	987,235	1,025,799	1,085,617	1,237,155	1,055,081
Maintenance	4,951,179	4,312,820	4,369,674	4,665,287	4,265,326	4,512,857
Utilities	1,139,723	1,184,186	1,185,604	1,126,326	1,182,598	1,163,687
Total Qualifying Expenditures	14,125,289	14,071,382	14,624,807	15,338,028	15,292,719	14,690,445
Levy Funds Provided	6,755,300	6,765,300	6,496,175	6,550,003	6,550,000	6,623,356
Internally Funded	7,369,989	7,306,082	8,128,632	8,788,025	8,742,719	8,067,089
	14,125,289	14,071,382	14,624,807	15,338,028	15,292,719	14,690,445
Levy Funds Provided	47.8%	48.1%	44.4%	42.7%	42.8%	45.1%
Internally Funded by CZ&BG	52.2%	51.9%	55.6%	57.3%	57.2%	54.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Source: Zoo Management and County Records						

The foregoing comments notwithstanding, on an overall basis, the CZ&BG appears to have been in compliance with all of the terms and conditions of the Agreement for the current term of the Levy.

2. Contract with the City of Cincinnati

Beginning July 1, 1957, the Zoological Society (the Zoo) entered into a series of contracts and contract amendments with the City of Cincinnati (the City), under which the Zoo agreed to operate and maintain all of the real and personal property of the City known as the Cincinnati Zoo and Botanical Gardens. On August 18, 2011, in the second amendment to the current contract, the City extended the term of the contract through December 31, 2061. There were no further amendments during the current levy period. The Zoo appears to be in compliance with the terms and conditions of its current contract with the City.

3. Union Contract

On September 16, 2017, the Zoo Society entered into its current contract with Local 282, Cincinnati Zoological Society Employees, Ohio Council 8, American Federation of State, County and Municipal Employees, AFL-CIO (the Union). Under the contract, which extends through September 10, 2021, the Zoo Society recognizes the Union as the sole and exclusive collective bargaining agency for the following groups of employees:

- Team Leaders
- Head Keepers
- Animal Keepers / Relief Keepers
- Night Keepers
- Building Maintenance Personnel
- Gardeners

Items of Notable Significance:

The Society may hire as many Non-Union temporary employees, at rates determined by the Society, as it deems necessary for the following purposes:

- To assist Building Maintenance, Gardeners and Ground Maintenance Personnel, except that these employees will not be permitted to operate heavy machinery;
- To assist with animal care

Non-Union temporary employees generally limited to 12 months before potentially being reclassified to union employees and there are some restrictions on the duties that such employees may perform.

Of note within the Union contract is its stipulation that pay increases "may be conditioned upon satisfactory performance and progress in the classification assigned." Actual increases in minimum wages during the period of the Union contract have been within the range of 2.5% to 3.0% per annum, a significant increase, especially given the low inflation rates of the past several years.

In accordance with the terms of the Union contract, the Zoo Society also provides employee benefits to full-time Union employees. The package provided is similar to the employee benefits available to full-time Non-Union employees. Some differences include the method used to fund the Union employees' vision, dental, and life insurance. This insurance is funded through contributions to the Union's Health & Welfare Plan. The Zoo Society appears to be in compliance with the terms and conditions of its contract with the Union.

4. Concessionaire Agreement

The Concessionaire Agreement was entered into by and between the Zoological Society of Cincinnati, Inc. (the Zoo or Society) and Service Systems Associates, Inc. (the Concessionaire) on July 7, 2010. The term of the Agreement is from July 10, 2016 until September 30, 2025. Thereafter, the Agreement can be extended for periods of five years by mutual written consent of the parties to the Agreement.

The Agreement provides the Concessionaire with the exclusive privilege to operate the Food Service and Merchandising Business at the Zoo facilities. This exclusivity is subject to pre-existing agreements for the provision of certain food and beverage items provided under Sponsorship Agreements in force at the time of the execution of the Agreement (e.g., La Rosa's Pizza, Skyline Chili, and United Dairy Farmers Dairy Products). Per the Agreement, the Zoo must consult with the Concessionaire prior to entering into any new Sponsorship Agreements subsequent to the execution of the Agreement. The CZ&BG also maintains the right to license photographic image rights.

Remuneration under the Agreement comes in the form of "Monthly Rent" equal to the applicable percentage of Gross Receipts for merchandise sold as follows:

Exhibit 45

<u>Contract Analysis--The Concessionaire Agreement</u>		
Category:	Sales subject to Commission:	Commission:
Concession Food and Beverage	All Receipts	25.5%
Concession Vending	All Receipts	45%
Member Food & Beverage 20% Discount	All Receipts	14%
Retail Gifts	All Receipts	29%
Catering Food, Beverage, & Alcohol	All Receipts	15%

If, in any applicable year, CZ&BG attendance exceeds 1,000,000 visitors, another part of the Agreement (the "Annual Guarantee" section) stipulates the Concessionaire will pay the amount, if any, by which the applicable "Guarantee Amount," as set forth in the table below, exceeds the total "Monthly Rent" for that calendar year. The guarantee amounts appear to be a conservative hurdle for the Concessionaire to meet. To date, annual attendance has exceeded 1,000,000 visitors and the Concessionaire's payments to the CZ&BG have exceeded the annual guarantee amounts.

On January 23, 2012, the agreement was amended as follows:

- The Concession Food and Beverage percentage payable to the CZ&BG was increased from 18% to 25.5%.

Exhibit 46

<u>Contract Analysis--The Concessionaire Agreement: Annual Guarantee</u>	
Calendar Year:	Annual Guarantee:
Year 1 (2011)	N/A due to construction activity
Year 2 (2012)	\$1,100,000
Year 3 (2013)	\$1,150,000
Year 4 (2014)	\$1,175,000
Year 5 (2015)	\$1,200,000
Year 6 and beyond	(to be negotiated after Year 5)

After September 30, 2015 and prior to October 1, 2016, the contract specifies the Concessionaire and the Society shall outline shared goals for an additional \$1,000,000 investment to be made by the Concessionaire in support of the Food Service & Merchandising Business at the Zoo facilities.

The CZ&BG is currently in the process of negotiating the amount of the Annual Guarantee.

On January 23, 2012, the agreement was amended as follows:

- The initial funded capital improvement amount, to be funded by the Concessionaire, was reduced from \$4,000,000 to \$1,315,000 (based upon actual costs).
- The additional funded capital improvement amount, for future capital improvements by the Concessionaire, was reduced from \$1,000,000 to \$500,000.

Should the Agreement terminate, the following items will become deliverables by and between CZ&BG and the Concessionaire:

- Zoo Facilities – Concessionaire shall deliver the Zoo facilities any existing equipment to the Society in good condition and state of repair.
- Remuneration – Concessionaire shall promptly pay any accrued rent or other amounts due but not yet paid to the Society.
- Inventory – Society or successor concessionaire shall purchase from the Concessionaire, at book value, the food service and merchandise inventory bearing the logo or name of the Cincinnati Zoo.
- Furniture, Fixtures and Equipment (FF&E) – the Society, at its option, may purchase any or all of the FF&E provided by the Concessionaire as depreciated value or fair market value of the FF&E as mutually agreed upon by the parties. This option is available to the Society within 14 days of the termination. The Concessionaire has the right and obligation to remove any FF&E if the Society does not exercise its purchase option.
- Leasehold Improvements – if the Agreement expires or is terminated without cause, the Society is obligated to pay the Concessionaire the remaining unamortized value of all Leasehold Improvements installed by the Concessionaire.

The Society appears to be complying with the terms and conditions of the Agreement and appears to be satisfied by the performance of the Concessionaire.

5. 4-D Attraction Agreement

The initial agreement was executed in April 2007 with an opening date of the 4-D Attraction to open no later than October 1, 2007. The initial term of the 4-D agreement was seven years.

Under the 4-D Attraction Agreement, Iwerks Entertainment, Inc. provides the Zoo Society with all equipment, services, and maintenance related to a cinematic "experience" available to "zoogoers". According to the CZ&BG's website, the 4-D Attraction is "a theater experience, a cinematic adventure that combines high-definition 3-D high projection with thrilling sensory effects such as wind, mist, snow scents, and more!"

Initially, the Agreement stipulated that the CZ&BG would compensate Iwerks 66% of the gross revenues generated by the 4-D Attraction.

The 4-D Attraction Agreement did not, and to date, has not produced the favorable financial outcome envisioned at its outset. The Agreement was amended, effective January 1, 2012, whereby, CZ&BG's payment obligation would provide Iwerks with ten installment payments of \$38,500 (\$385,000 annually) during calendar years 2012, 2013, 2014, and 2015. This effectively converted the payment structure from a percentage of proceeds method to a fixed monthly payment.

During the current levy period, consideration was given to convert the 4-D facility into a sting ray touch tank attraction. This concept was subsequently abandoned.

A subsequent amendment covers Iwerks compensation for Calendar years 2016 – 2019

The schedule of total annual payments for 2016 -2019 follows:

- 2016 - \$275,000
- 2017 through 2019 - \$290,000

The 4-D Attraction does not appear to have been a significant attendance draw over the years it has been open. Recently, admission to the theater has been added to member benefits making it difficult to quantify the financial success of this attraction. The Iwerk's 4-D Attraction gets mixed reviews on customer survey sites.

Recent financial performance of the 4-D Attraction is as follows:

	2013	2014	2015	2016
Gross Revenue	\$ 452,097	\$ 483,348	\$ 404,278	\$ 405,364
Payment obligation Iwerks	385,000	385,000	385,000	275,000
Net before Zoo expenses	\$ 67,097	\$ 98,348	\$ 19,278	\$ 130,364

Total annual payments to Iwerks are currently fixed at \$290,000 through 2019.

Recommendation:

The CZ&BG should carefully measure and evaluate the performance of the 4-D Attraction relative to its viability and the alternative uses of the site and related facilities.

6. Solar Power Purchase Agreement

The Solar Power Purchase Agreement (Solar Agreement) is a complex contract executed on December 22, 2010 by and between CZ Solar, LLC (Power Provider), and the Zoological Society of Cincinnati (Purchaser or CZ&BG) with acknowledgement by Melink Corporation (Guarantor). CZ Solar, LLC and Melink Corporation are related parties, and their Chief Financial Officers are one and the same person.

In one sense, the installation of the Solar Array is a major improvement to the CZ&BG. In addition to providing solar power, a significant portion of the array offers the benefit of convenient shaded parking for visitors to the CZ&BG. The agreement, however, requires the CZ&BG to make major decisions regarding the array in the near term.

The Solar Agreement can be summarized as follows:

- The Power Provider agreed to and did install a solar panel array on the Purchaser's property, and the Purchaser agreed to purchase all of the electrical power produced by the solar panels at agreed upon rates.
- The Purchaser has its first option to purchase the Solar Panel Array for \$2.3 million on May 1, 2018.
- If the Purchaser does not execute the first option, then the Solar Agreement will continue to the end of its initial term on April 30, 2021.
- Between the dates of the first option and the end of the initial term (i.e., April 30, 2017), the Purchaser is obligated to purchase all of the electrical power produced by the Solar Array at rates which are significantly higher than typical market prices for electric power.
- At the end of the initial term (i.e., April 30, 2021), the Purchaser has the option to purchase the Solar Array for \$2.1 million.
- If the Purchaser does not buy the array at this point, it is obligated to buy all of the electrical power produced by the Solar Array in contract years 11-25 at market rates.
- The Guarantor also has the option to purchase the Solar Array at fair market value over the term of the Agreement. Such purchase by the Guarantor, if it should occur, does not appear to impact the rights and/or obligations of the CZ&BG under the Solar Agreement.
- If the Solar Agreement is terminated at any point, the Power Provider is obligated to remove the Solar Array. Expenses for this removal would be shouldered by the CZ&BG, and the CZ&BG would likely experience the negative impact of parking lot disruptions and customer service issues brought on by the removal.

The following Exhibit summarizes a pre-contract analysis used by the CZ&BG as part of its decision-making process. The analysis assumes the CZ&BG will exercise its option and purchase the Solar Array in year eight under the present terms of the contract. Other assumptions, such as the price of electricity and availability of tax credits, are based on what was estimated prior to the CZ&BG entering into the "Solar Power Purchase Agreement."

Exhibit 47

Solar Array Pre Contract Cash Flow Analysis Assuming CZ&BG Purchases Solar Array in Year 8								
		Projected Power Savings (Cost)	Estimated Value Renewable Energy Credits	Operating Expense & Insurance	Maintenance	Capital Cost Principal	Interest	Total Estimated Annual Cash Flows
								Total Estimated Cumulative Cash Flows
YEAR 1	2011	\$ 8,943						\$ 8,943
YEAR 2	2012	7,037						7,037
YEAR 3	2013	4,743						4,743
YEAR 4	2014	936						936
YEAR 5	2015	(3,089)						(3,089)
YEAR 6	2016	(7,343)						(7,343)
YEAR 7	2017	(11,834)						(11,834)
YEAR 8	2018	143,480	\$ 306,909	\$ (30,000)		\$ (240,000)	\$ (96,000)	84,389
YEAR 9	2019	146,306	303,839	(30,300)		(240,000)	(86,400)	93,445
YEAR 10	2020	149,189	300,801	(30,603)		(240,000)	(76,800)	102,587
YEAR 11	2021	152,128	65,514	(30,909)		(240,000)	(67,200)	(120,467)
YEAR 12	2022	155,124	66,805	(31,218)		(240,000)	(57,600)	(106,889)
YEAR 13	2023	158,180	68,121	(31,530)		(240,000)	(48,000)	(93,229)
YEAR 14	2024	161,297	69,463	(31,846)		(240,000)	(38,400)	(79,486)
YEAR 15	2025	164,474		(32,164)	\$ (162,500)	(240,000)	(28,800)	(298,990)
YEAR 16	2026	167,714		(32,486)		(240,000)	(19,200)	(123,972)
YEAR 17	2027	171,018		(32,811)	(162,500)	(240,000)	(9,600)	(273,893)
YEAR 18	2028	174,387		(33,139)				141,248
YEAR 19	2029	177,823		(33,470)	(162,500)			(18,147)
YEAR 20	2030	181,326		(33,805)				147,521
YEAR 21	2031	184,898		(34,143)	(162,500)			(11,745)
YEAR 22	2032	188,540		(34,484)				154,056
YEAR 23	2033	192,255		(34,829)				157,426
YEAR 24	2034	196,042		(35,177)				160,865
YEAR 25	2035	199,904		(35,529)				164,375
		\$3,063,478	\$1,181,452	\$ (588,443)	\$ (650,000)	\$ (2,400,000)	\$ (528,000)	\$ 78,487

The analysis above represents one of the more likely scenarios that will be followed by the CZ&BG. Many of the risks associated with this scenario are discussed later in this report. One possible benefit not quantified above that CZ&BG's management believes is a possibility, would be future power savings realized if the life of the Solar Array extends beyond 25 years.

As of this writing, the CZ&BG has purchased all of the electrical power produced by the Solar Array, and it has been recognizing, on a monthly basis, its costs for this power. All parties appear to be complying with the terms and conditions of the Solar Agreement.

Within the period of the initial term, in 2018, the CZ&BG has the option to purchase the Solar Array for \$2.4 million, which is currently their intent. If the option is exercised, the CZ&BG would avoid paying the escalated 2018-2020 rates. Depending upon the efficiency of the Solar Array's generation of power, this purchase could also result in long-term cost savings.

The CZ&BG has communicated to us their intent to purchase the Solar Array in the spring of 2018. The CFO stated that the Zoo had not yet agreed upon the source of funding to purchase the Solar Array. The CFO further stated that the output of the solar panels has decreased due to panel degradation; however, the output still exceeds the levels that were communicated to the CZ&BG at the beginning of the contract period. The COO stated that Zoo personnel working with Melink prior to the purchase date:

- To develop a transitional training program for zoo staff and
- To negotiate a one -two year maintenance program that would begin as of the purchase date.

It was also noted that the CZBG would be responsible for the two solar array inverters, at a cost of \$125,000 each, within a 10-year horizon.

Summary Findings:

With respect to the Solar Array CZ&BG:

- *Will purchase the Solar Array in 2018 for \$2.3 million.*
- *Will incur new costs during the transition period.*
- *Will assume some large expenses relative to the maintenance of the Solar Array.*
- *Has no established plan relative to the funding of the purchase price.*

CZ&BG should consider establishing a Board-designated fund within the Foundation to accumulate, over time, the capital necessary to pay for the purchase of the Solar Array so as to avoid any interest costs relative to financing the purchase cost of the Solar Array. The CZ&BG is currently considering the use of established credit lines to pay for the purchase of the Solar Array.

Solar Agreement Significant Risk Factors and Potential Financial Statement Presentation and Disclosure Issues

Overall Risks:

- Fluctuations in the cost of electricity
- Fluctuations in the amount of electricity required to be purchased
- Fluctuations in the cost of money (interest rate risk)
- Future advances in technology

First Purchase Option – 2018

- No established plan for prefunding the \$2.4 million purchase price in order to eliminate or mitigate interest rate risk

Review of Farm Operations

Mast Farm and Bowyer / Bogen Farm

Mast Farm (Clermont County):

The 104 acre Mast farm was donated in 2000 and is owned outright by the CZ&BG. It consists of 130 acres. Currently, the Mast Farm does not generate any revenue. In 2017, it incurred expenses that resulted in a net loss of \$157,312. The loss for 2018 is projected to be \$162,000.

The CZ&BG has full time staff on site in charge of cheetah breeding and animal care.

The cheetah breeding program is maintained at the Mast farm and an elderly male Grevy's zebra is also maintained at the farm.

The Cincinnati Zoo is one of only nine accredited institutions that participate in the Cheetah Breeding Center Coalition to create a sustainable population and prevent extinction. There have been 59 cubs born at the Mast Farm location since it opened in 2002.

Bowyer / Bogen Farm (Warren County):

The Bowyer farm was donated to the CZ&BG in 1995 with the condition that they maintain the property in perpetuity for zoological purposes.

The Bowyer farm generated \$15,270 in revenues in 2017 from property rental, farm production and grant revenue. 2017 expenses totaled \$54,006. This resulted in a net loss of \$38,736.

For 2018, revenues are projected to be \$15,500. 2018 expenses are projected to be \$38,300. The 2018 projected net loss is \$22,800.

The Bowyer farm rents some of its land to a farmer who grows green beans and shares a portion of the income with the CZ&BG.

There are beehives on the property and there are plans to harvest the honey for sale on the farm and at the CZ&BG. There is a large grove of sugar maples on the property and the State of Ohio will test the trees to see if they would be a viable source of sap for maple syrup production. If the test is positive, sugaring could begin in 2019 with syrup production in 2019. The syrup would be sold on the farm and at the CZ&BG.

The CZ&BG has shifted some of the growth of horticultural plants, shrubs and trees from the Zoo to the farm, thus freeing up some land at the Zoo.

There are plans to begin growing grass crops on the farm. It is estimated the CZ&BG can significantly reduce the cost of hay it uses by growing it and storing it on the farm. The first grass harvest will be in calendar year 2018. Full production will take three-four years to develop. It is anticipated that after development is completed, all grass needs for the Zoo will be met by Bowyer farm production.

Grant monies from the State of Ohio have and are being used to begin the development of wetlands marsh on a small portion of the property. The marsh is already attracting a number of species of waterfowl. Further wetlands development is planned for 2018. The Zoo has been actively working to return a rich array of plant and animal species that historically are naturally occurring in Warren County.

Ohio Assembly Budget monies awarded will be used to fund the improvement of electrical service, sanitary facilities and the sourcing of potable water. Grant monies will also be used to build a new pole barn on the farm. The barn will be used for hay and maintenance equipment storage. Additionally, these monies will be used to fund the building of a large pond on the farm, walking paths, a picnic shelter and a cheetah run facility. Cheetah's will not reside at the farm and will be transported from the Zoo to the farm and then back on days when cheetah runs are scheduled.

Originally their plans were to move the cheetah breeding program and the other animals at the Mast farm to the Bowyer farm, however, there was push back by local residents and the necessary variances could not be obtained from Warren county and the City of Lebanon.

Cash Management Policies and Procedures

During the term of the current levy, the CZ&BG has made enhancements and improvements to its already sophisticated cash management policies and procedures.

The process revolves around "Cash Recycler" equipment. The combination of the policies and procedures and the "Cash Recycler" equipment results in a safe and sound environment for the processing of cash and negotiable instruments.

Cash collection for admissions is concentrated at the Main Gate of the CZ&BG during the nonpeak season. Due to the layout of the CZ&BG, two secondary entrances are operated during peak times of admission. These are the Safari Camp and Cheetah entrances which are aligned with secondary parking facilities along the CZ&BG's perimeter. All entrances utilize "Cash Recycler" equipment and common Cash Handling Policies/Procedures.

Additionally, the following departments use the "Cash Recycler" equipment and Cash Handling Policies and Procedures:

- The Education Registration Desk
- Wild Encounters for animal feedings
- Rides and Attractions, including the CZ&BG's train, carousel, stroller rental, and 4-D Attraction
- Membership

The departments not using the "Cash Recycler" are development and group sales. Cash and negotiable instruments from these areas are batched, processed, and deposited into the main vault using secure deposit box identical to a "Night Drop Box" for commercial deposits at a financial institution.

All cash receipts and negotiable instruments received are processed within the grounds of the CZ&BG under a system of dual controls, deposit validation and/or "blind balance" controls. An armored guard service picks up the bank deposits, consisting of cash and negotiable instruments, two or three times a week, depending on volume. This frequency of armored guard pick-ups is regulated to minimize armored guard costs without overly impacting float in the deposit system.

Summary Finding

Overall, the CZ&BG appears to have a safe, sophisticated, fine-tuned, and secure process for the handling of their cash receipts and negotiable instruments.

VIII. Benchmarking Analysis

As prescribed in the scope of this performance review, HW&Co. has conducted a comparison of the CZ&BG with several national zoos as well as, regional zoos and zoos in Ohio to examine trends in the community of zoos and their potential impact on the CZ&BG. One of the major items impacting comparability within a peer group comparison of zoos is the CZ&BG's business model.

Summary Finding

The CZ&BG operates using a business model employed by a large majority of its peers in the zoo community. Like many other zoos, the CZ&BG is privately-managed but relies on continued financial support from the public sector. Trends affecting zoos across the nation, including the CZ&BG, include:

- *Member visits make up an ever-growing percentage of attendance.*
- *Costs for new exhibits continue to escalate, while the need to stay competitive with peer zoos in integrating new features drives zoos to build ever larger and more expensive exhibits. Expenses of zoo operations and exhibits are also driven by escalating AZA animal care, management and containment requirements.*
- *Leadership recognizes the importance of staying flexible within a changing fiscal environment and of appealing to new types of patrons and funding sources as necessary.*
- *The AZA, Zoos and their patrons increasingly emphasize the values of excellent animal care conservation and sustainability.*
- *Efforts are directed at measuring outcomes and demonstrating quantifiable success.*
- *Zoos as a whole are relying more on earned income and less on public and private funding than in the past.*

A comparative analysis of the CZ&BG against Ohio zoos, regional area zoos, selected other North American zoos, and selected Cincinnati area attractions, yielded a favorable outcome for the CZ&BG on an overall basis. A list of the zoos and attractions included in the analysis follows:

Ohio Zoos:

Akron Zoological Park	Akron, Ohio
Cincinnati Zoo & Botanical Garden	Cincinnati, Ohio
Cleveland Metroparks Zoo	Cleveland, Ohio
Columbus Zoo and Aquarium	Powell, Ohio
Toledo Zoological Gardens	Toledo, Ohio

Regional Area Zoos:

Indianapolis Zoo Society, Inc.	Indianapolis, Indiana
Louisville Zoological Garden	Louisville, Kentucky
Pittsburgh Zoo & PPG Aquarium	Pittsburgh, Pennsylvania

Selected North American Zoos:

Chicago Zoological Society – Brookfield Zoo	Brookfield, Illinois
Bronx Zoo	Bronx, New York
Lincoln Park Zoo	Chicago, Illinois
Smithsonian National Zoological Park	Washington, District of Columbia
Omaha’s Henry Doorly Zoo	Omaha, Nebraska
Oregon Zoo	Portland, Oregon
Philadelphia Zoo	Philadelphia, Pennsylvania
St. Louis Zoo	St. Louis, Missouri
San Diego Zoo	San Diego, California
Toronto Zoo	Toronto, Ontario, Canada
Zoo Atlanta	Atlanta, Georgia

Cincinnati Area Attractions:

Cincinnati Reds – MLB	Cincinnati, Ohio
Cincinnati Museum Center	Cincinnati, Ohio
Coney Island Amusement Park	Cincinnati, Ohio
Kings Island Amusement Park	Mason, Ohio
Newport Aquarium	Newport, Kentucky
The Beach Waterpark*	Mason, Ohio

* Closed for renovation, scheduled to reopen in fall 2018.

Summary Finding**AAA and Website Zoo Rankings:**

Six “Top Ten U.S. Zoos” websites were analyzed, and the CZ&BG was ranked in the Top Ten on three of these websites. Although these rankings cannot be considered truly objective, they are worth mentioning because they suggest the CZ&BG has a strong identity on the national as well as on the regional level. American Automobile Association (AAA) rates the CZ&BG as a “GEM” as they do for most of the other zoos and attractions in their analysis. A “GEM” rating in AAA tour books helps to attract reader attention to the CZ&BG as a place of interest to visit.

TripAdvisor ranks the CZ&BG as the #2 out of 189 top attractions in the Cincinnati Area, surpassed only by the Cincinnati Reds Great American Ballpark. Individual consumer rankings on the Trip Advisor website are very favorable with over 3,000 reviews and an average rating of 4.5 out of 5.0.

In most instances as demonstrated in the chart below, approximately 92% of individual consumers gave CZ&BG an "Excellent" or "Very Good" rating.

CZ&BG - Recent TripAdvisor Visitor Ratings

	Responses	Percentage	Cumulative Percentage
Excellent	2,082	69.82%	69.82%
Very Good	664	22.27%	92.09%
Average	164	5.50%	97.59%
Poor	36	1.21%	98.79%
Terrible	36	1.21%	100.00%
Total	2,982	100.00%	

Areas consumer rankings are favorable:

- New Exhibits
- Affordable
- Child Friendly
- Beautiful Grounds
- Animal Care
- Easy to Navigate
- Winter Lights, and of course –
- FIONA

Areas consumer rankings were unfavorable:

- Parking
- Bad Location
- Price of Concessions
- Construction
- Animal Care – "Animal Jail"

Overall, the CZ&BG has an excellent reputation on a local, regional, and national basis with customers, peer group zoos and attractions, the AZA and AAM.

Admission Prices:

Compared to Peer Group Zoos, the CZ&BG's admission and parking prices appear to be reasonable, especially given its location within an urban area and its high rankings by TripAdvisor and by the "Top Ten Zoos" websites mentioned previously.

Exhibit 48

Benchmarking/Peer Group Analysis												
Per 2018 AAA TourGuides								Per March 2017 AZA Data				
Rating												
AAA Top				Admission				Operating/		Total	Budget	
State	GEM	10		Adult	Child	Senior	Parking	Annual	Total	Annual	as a	
City	Prov.	Y/N	Zoos (1)					Attendance	Acreage	Operating Budget	Cost Per	Attendee
Ohio Zoos:												
Akron	OH	No	None	\$ 12.00	\$ 9.00	\$ 10.00	\$ 3.00	398,897	35 / 77	\$ 8,662,095		\$21.72
Cincinnati	OH	Yes	3	\$ 18.00	\$ 13.00	\$ 13.00	\$ 10.00	1,629,477	81 / 81	\$ 32,556,200		\$19.98
Cleveland	OH	Yes	2	\$ 14.25	\$ 10.25	\$ 10.25	\$ -	1,057,796	70 / 183	\$ 20,045,888		\$18.95
Columbus	OH	Yes	3	\$ 19.99	\$ 14.99	\$ 14.99	\$ 10.00	2,321,657	350 / 580	\$ 61,300,000		\$26.40
Toledo	OH	Yes	2	\$ 19.00	\$ 16.00	\$ 16.00	\$ 7.00	951,621	74 / 74	\$ 26,000,000		\$27.32
Average - Ohio Zoos												\$23.36
Regional Area Zoos:												
Indianapolis	IN	Yes	2	\$15.45 to \$ 22.70	\$11.70 to \$ 17.20	\$15.45 to \$ 22.70	\$ 6.00	1,121,720	64 / 64	\$ 26,500,000		\$23.62
Louisville	KY	Yes	2	\$ 16.25	\$ 11.75	\$ 11.75	\$ 5.00	857,742	90/ 151	\$ 14,964,100		\$17.45
¹ Pittsburgh	PA	Yes	3	\$ 16.00	\$ 14.00	\$ 15.00	\$ -	N/A	N/A	N/A		N/A
Average - Regional Zoos												\$20.95
Note: If zoos presented seasonally pricing, then the peak season prices are presented												
¹ Pittsburgh Zoo dropped their AZA accreditation over an Elephant handling disput												

Attendance:

Objective analysis of peer group attendance data is made difficult by the different geographical and demographical dynamics relative to individual zoos and attractions in the peer group. However, it is worth noting that the CZ&BG has the highest attendance of all Ohio zoos except for the Columbus Zoo, which has far more operating acreage, an aquarium and a significantly higher operating budget than does the CZ&BG.

Total Operating Cost Per Attendee:

Within Ohio, Columbus and Toledo have the highest budgeted cost per attendee due primarily to high budgeted costs. CZ&BG has the second lowest cost relative to this measure in this measurement primarily due to its higher attendance. The CZ&BG's operating cost per attendee is below the average for Ohio zoos, and it is more than below that of the average for the Selected Other North American zoos listed at the start of this section.

Overall, the CZ&BG compares very favorably with peer group zoos and with Cincinnati area attractions relative to each of the performance metrics that were analyzed.

Within the context of Cincinnati area attractions generally, CZ&BG pricing appears to be even more favorable. The chart below compares CZ&BG admission and parking prices to those of other attractions in the city. The Cincinnati Reds, the Newport Aquarium, and local amusement parks have significantly higher admission prices than does the CZ&BG. The admission prices of the CZ&BG relative to the Cincinnati Museum Center, another highly rated attraction by TripAdvisor are closely aligned. Overall, the CZ&BG's admission and parking prices are competitive relative to both peer group zoos and to Cincinnati Area Attractions.

Exhibit 49

Benchmarking Analysis- Cincinnati Area Attractions:										
	City	State Prov.	Rating		Admission			Parking	Annual Attendance	
			AAA GEM Y/N	Top 10 Zoos (3)	Adult	Child	Senior			
Cincinnati Reds 2012 National League Champions	Cincinnati	OH	N/R	N/A	\$22-\$ 253	N/A	N/A	\$6.00 to \$ 25.00	2,347,000	
Cincinnati Museum Center - Natural History, Children's and History Museums	Cincinnati	OH	Yes	N/A	\$ 12.50	\$ 11.50	\$ 8.50	\$ 6.00	1,300,000	
Coney Island Pools and Rides	Cincinnati	OH	N/R	N/A	\$ 23.95	N/A	\$ 10.95	\$ 8.00	Not released	
Kings Island	Mason	OH	Yes	N/A	\$37.99 to \$ 54.99	\$ 33.99	\$ 33.99	\$12.00 to \$ 20.00	3,100,000	
Newport Aquarium	Newport	KY	Yes	N/A	\$ 23.00	\$ 15.00	\$ 23.00	\$0 to \$ 8.00	687,500	
The Beach Water Park	Mason	OH	N/R	N/A	\$ 27.99	\$ 19.99	\$ 19.99	\$ 8.00	N/A	

Note: The Cincinnati Museum Center is currently closed for renovation and is scheduled to reopen in the fall of 2018.

We reviewed the Admissions by zip code and county provided by management for all five years. Visitors came from Indiana, Kentucky and Ohio with the breakout by state fairly constant over the five-year period. Ohio is the dominate visitor group providing on average 73% of admission, membership and parking revenues. Based on the data by county, we evaluated the number of Hamilton county visitors as a percentage of the total admissions. Hamilton County residents averaged 47% of total visitors over the five-year period.

Exhibit 50

Five Year Attendance History 2013 - 2017					
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Indiana	4.5%	4.6%	3.7%	4.8%	5.1%
Kentucky	22.0%	22.5%	22.8%	21.7%	22.0%
Ohio	<u>73.5%</u>	<u>72.9%</u>	<u>73.5%</u>	<u>73.5%</u>	<u>72.9%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Hamilton County	<u>46.8%</u>	<u>47.5%</u>	<u>44.0%</u>	<u>48.8%</u>	<u>49.2%</u>

Hamilton County residents as a percentage of total visitors represent nearly half of all visitors to the CZ&BG. Not only are residents supporting the CZ&BG through admission, membership and parking fees, but also through their tax dollars which are in turn allocated to levy funds. Added benefits to county residents should be considered, such as: discounts on admission and membership fees or additional free days at the zoo.

Benchmarking vs. Inflation:

The recent growth in popularity of the CZ&BG and its success as an attraction and as a haven for a wide variety of animal species conceal some other benchmarking metrics that may be less favorable. Namely, over the period analyzed, its revenues per admission exceeded inflation. More specifically, over the period of 2013-2017, the Park Revenues, per admission, increased by 8.79% on a cumulative basis. Over the same period, the Consumer Price Index (the CPI) increased by 6.61%. Both the Exhibits on the following page offer a visual comparison.

Exhibit 51

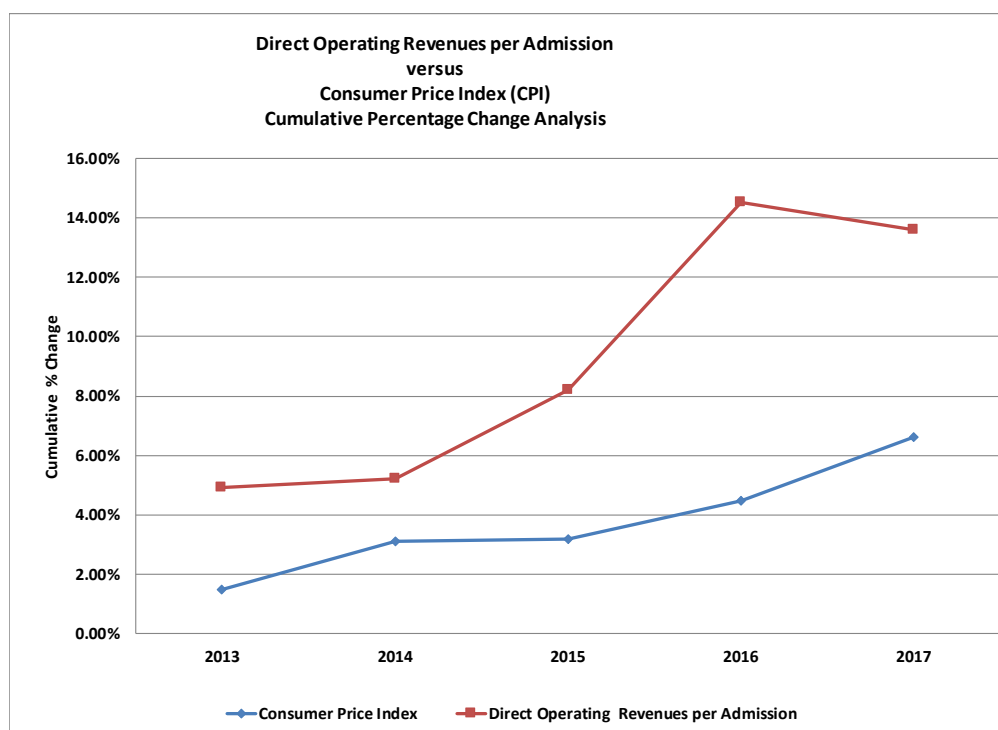


Exhibit 52

Direct Operating Revenue per Admission Versus Consumer Price Index (CPI) Cumulative Percentage Change					
Year	Annual Inflation Rate Based on the CPI	Cumulative Change	Direct Operating Revenues per Admission	Annual Percentage Change	Cumulative Percentage Change
2013	1.50%	1.50%	\$ 13.25	4.92%	4.92%
2014	1.60%	3.10%	\$ 13.29	0.31%	5.23%
2015	0.10%	3.20%	\$ 13.69	2.97%	8.20%
2016	1.30%	4.50%	\$ 14.55	6.30%	14.50%
2017	2.11%	6.61%	\$ 14.42	-0.92%	13.58%

Note 1: CPI data per "usinflationcalculator.com"

Note 2: Direct Operating Revenues per Admission equals Direct Operating Revenues divided by Total Admissions

Note 3: Direct Operating Revenues does not include Program Revenues

As the table on the previous page demonstrates, cumulative increases in Direct Operating Revenues per Admission, on a percentage basis, are tracking ahead of cumulative increases in the CPI. In 2016, the cumulative gap was 10 percentage points. However, since 2016, CPI growth has been closing in on the growth change in Park Revenues.

Summary Finding

The positive gap relationship between Direct Operating Revenues per Admission and CPI is a sign the CZ&BG is theoretically less dependent on Tax Levy Funds.

The exhibits below show the results of direct operating revenues and expenses which measure operating results before levy support, unrestricted gifts and fundraising. While direct operating expenses have outpaced direct operating revenues during the period reviewed, the deficit narrowed in 2016 and 2017 as operating revenues increased notably and operating expenses leveled.

Exhibit 53

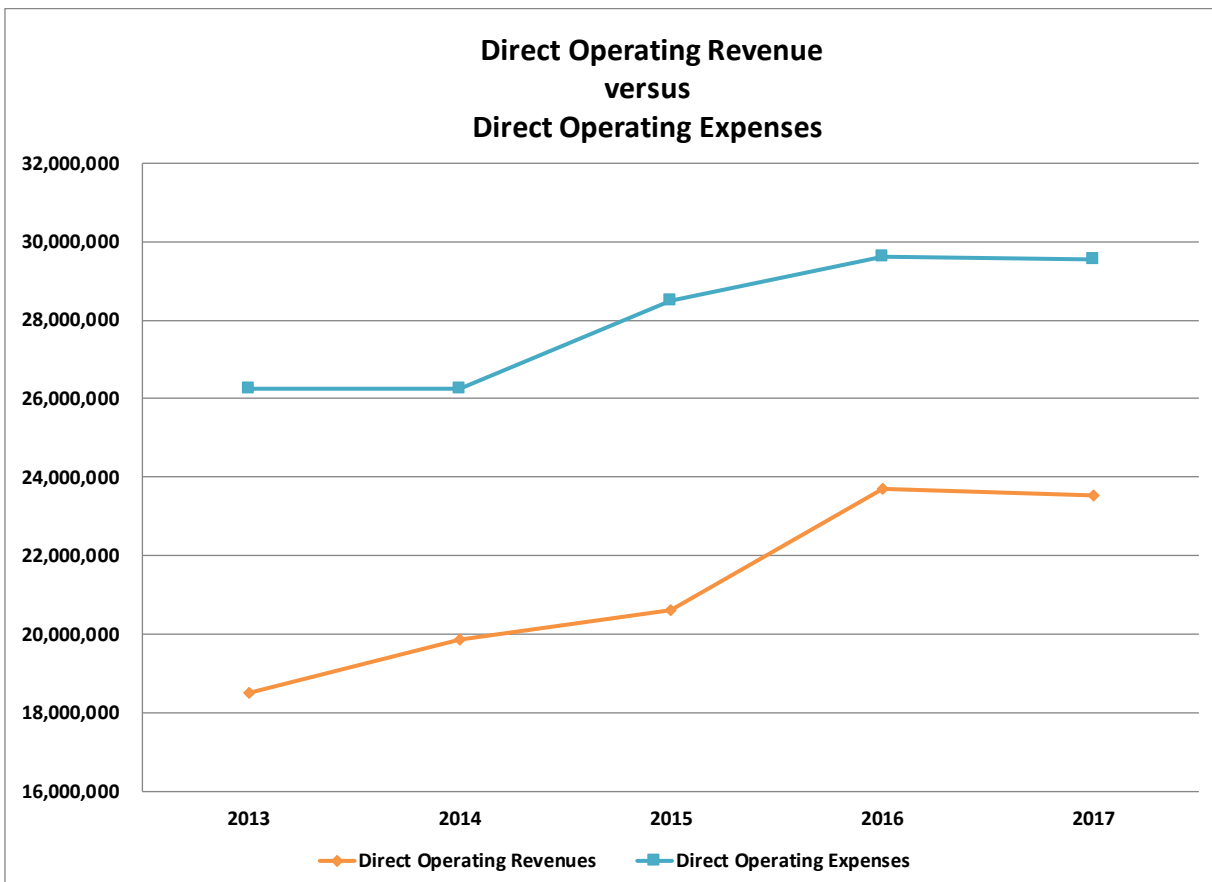
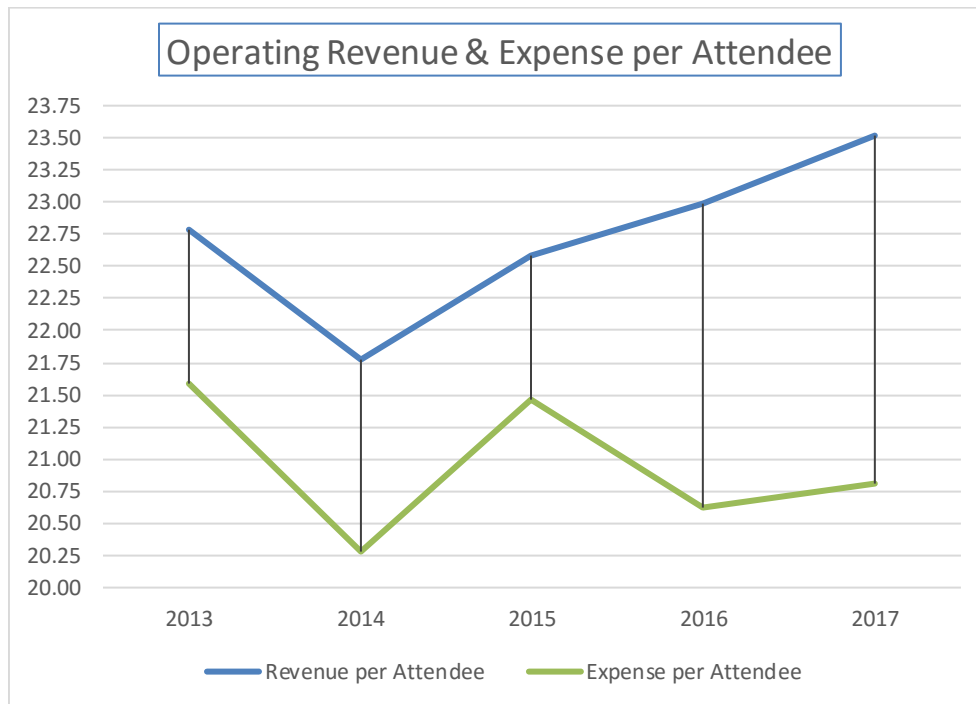


Exhibit 54

Cumulative Change in Direct Operating Revenues						
Versus						
Cumulative Change in Direct Operating Expenses						
Direct Operating Revenue and Expense						
Year	Revenue	Change	Cum.	Expense	Change	Cum.
2013	18,495,867	-	-	26,241,767	-	-
2014	19,967,074	1,471,207	1,471,207	26,235,188	(6,579)	(6,579)
2015	20,605,896	638,822	2,110,029	28,505,306	2,270,118	2,263,539
2016	23,709,920	3,104,024	5,214,053	29,613,663	1,108,357	3,371,896
2017	23,525,691	(184,229)	5,029,824	29,545,902	(67,761)	3,304,135
Note 1: Direct Operating Revenues do not include Program Revenues						

While the exhibits above depict *direct* operating results, the following Exhibits are the *net* operating results which include levy funds, unrestricted gifts, fundraising, and sponsorships in the operating results but exclude endowment activity.

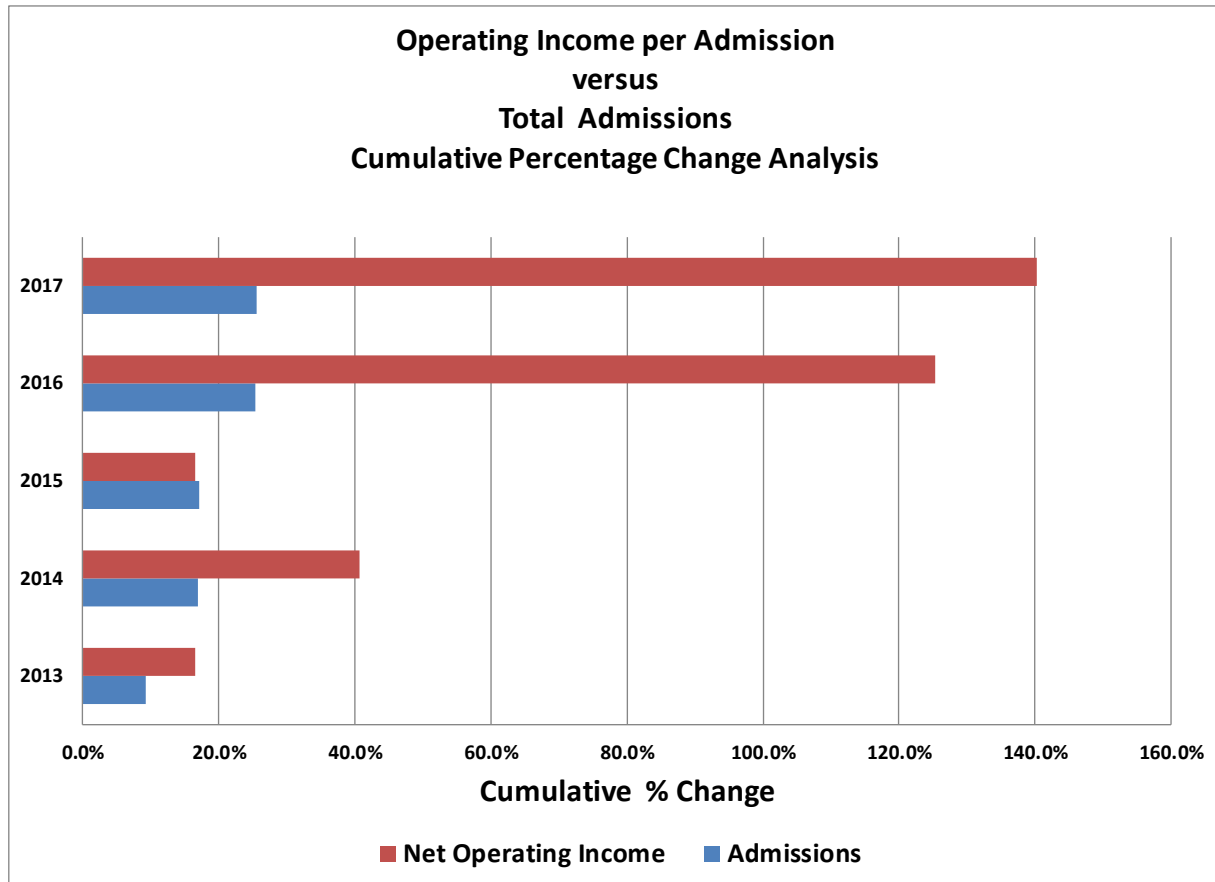
Exhibit 55



Operating results during the past levy period have been positive with the gap between revenue and expenses increasing during 2016 and 2017. This increase is mainly attributed to unrestricted gifts, fundraising and sponsorships in 2016 and 2017.

Below shows the relationship between changes in Admission and the impact on Net Operating Income over the last Levy period.

Exhibit 56



During the levy period, the CZ&BG experienced increased attendance, and record high attendance in some years. Increased attendance revenues contributed positively to the “bottom line”, operating income.

Executive Compensation

Our Executive Compensation Analysis covers the following positions:

Chief Executive Officer (CEO)
 Chief Operating Officer (COO)
 Chief Financial Officer (CFO)

The Executive Compensation Analysis was made using data from Ohio and regional zoos including:

Cincinnati Zoo and Botanical Gardens
 Akron Zoo
 Columbus Zoo and Aquarium
 Toledo Zoo
 Indianapolis Zoo
 Pittsburgh Zoo and PPG Aquarium

The Cleveland and Louisville Zoos were not included in this analysis due to the fact that they are part of governmental entities and are not subject to the IRS Form 990 filing requirements.

Our compensation analysis is based upon "Total estimated compensation" as defined by the IRS and disclosed in the IRS Form 990. "Total estimated compensation" is the total of "Reportable compensation" and "Estimated other compensation." "Reportable compensation" consists of W-2 and/or 1099-MISC compensation including "Base compensation", "Bonus and incentive compensation" and "Other reportable compensation." "Estimated other compensation" consists of "Retirement and other deferred compensation" and "Nontaxable benefits."

The CZ&BG's Executive Compensation Policy is summarized within its 2015 Form 990 disclosures as follows: (2015 was the latest year of IRS Form 990 data available for comparable reporting): "The Executive Committee of the Board of Trustees reviews and approves the Executive Director's compensation and bonus. Comparability data such as compensation surveys were provided for the committee to review. The Executive Director receives comparability data and determines the compensation and salaries for all other employees."

An item of note regarding compensation disclosed in the Form 990 for 2015 (the most recent year for which comparable 990 data was available) was that the CZ&BG "provided some non-fixed payments in the form of bonuses that were tied to performance in general, not to specific revenue or earnings."

Direct comparison of Executive Compensation has become increasingly difficult due to changes in Form 990 reporting practices and changes in reportable officer's titles, functions and duties – over time.

Exhibit 57

Compensation Analysis CZ&GB to Other Ohio and Regional Zoos Using IRS Form 990 Data for 2015 - <i>Note 1</i>		CZ&BG Above/ Below Median
	Ranking <i>Note 2</i>	<i>Note 3</i>
Chief Executive Officer (or Equivalent) - <i>Note 3</i>:		
Indianapolis Zoo	1	
Columbus Zoo and Aquarium	2	
Pittsburgh Zoo and PPG Aquarium	3	
Cincinnati Zoo and Botanical Gardens	4	-1.89%
Akron Zoo	5	
Toledo Zoo	6	
Chief Operating Officer (or Equivalent) - <i>Note 3</i>:		
Columbus Zoo and Aquarium	1	
Indianapolis Zoo	2	
Cincinnati Zoo and Botanical Gardens	3	21.83%
Akron Zoo	4	
Toledo Zoo	5	
Pittsburgh Zoo and PPG Aquarium	6	
Chief Financial Officer (or Equivalent) - <i>Note 3</i>:		
Columbus Zoo and Aquarium	1	
Akron Zoo	2	
Indianapolis Zoo	3	
Cincinnati Zoo and Botanical Gardens	4	-6.52%
Pittsburgh Zoo and PPG Aquarium	5	
Toledo Zoo	6	
<i>Note 1:</i> 2015 was the latest year of IRS Form 990 data available for a comparable reporting analysis		
<i>Note 2:</i> Ranking was based on "Total Estimated Compensation" as disclosed in IRS Form 990 as compared to the median of the "Total Estimated Compensation" for the Zoos included in the analysis		
<i>Note 3:</i> Median is used due to the differences in the sizes and complexities of the zoos included in the analysis and variability between the job titles and actual span of control for officers at each zoo included in the analysis		
<i>Note 4:</i> No data was available for the Cleveland Zoo and Louisville Zoo. They report through governmental agencies and are not required to file a IRS Form 990		

As the chart above reveals, the total compensation of the CZ&BG CEO ranked fourth out of six among the other zoos in the analysis, trailing the median of the five other zoos in the analysis by 1.89%. The CZ&BG CEO's total compensation exceeded only that of the CEOs of the Akron Zoo and the Toledo Zoo among the zoos in the analysis.

The CZ&BG COO's total compensation ranked second out of six among the zoos in the analysis, exceeding the median COO compensation in this category by 21.83%. It should be noted there was a higher degree of variability in COO total compensation than there was in CEO total compensation. This variability could be due to differences in job responsibilities or other unknown factors. The variability does not correlate closely with zoo size in acreage, with zoo attendance figures, or with the complexity of operations of the zoo. For example, the COO of the Pittsburgh Zoo and PPG Aquarium, which has high rates of attendance and comparative complex operations, had the lowest COO total compensation within all of the zoos in the analysis.

The CFO of the CZ&BG earned compensation that ranked fourth out of six among the zoos in the analysis and the earned compensation falls below the median CFO compensation within the analysis by 6.52%. Like COO total compensation, CFO total compensation varied between zoos far more than did CEO total compensation. This variability could be due to differences in job responsibilities or to other, unknown factors. For example, at the CZ&BG, the title of CFO is actually Vice President of Administration and CFO. This would indicate a broader span of control and level of responsibility above that of being the CFO only. During our review, we noted that the Vice President of Administration and CFO of the CZ&BG did, in fact, have a span of control greater than the responsibilities that are normally associated with the title of CFO. The variability does not appear to necessarily be due to the size or complexity of the zoo. The Pittsburgh Zoo and PPG Aquarium, a complex, high-attendance zoo, was again an outlier. This zoo earned the second lowest total compensation among all of the zoos in the analysis.

Summary Finding

The Board of Trustees and the CEO of the CZ&BG appear to be effectively managing the total compensation of executive management personnel on a competitive basis that is conducive to sustainability and management continuity.

Annual Levy Support of Ohio Zoos

The chart below provides a limited data set for the comparison of Ohio zoos' relative reliance on Tax Levies to fund their operating and capital expenditures. It indicates that levy support for the CZ&BG operating expenses is not unreasonable within this comparison group.

Exhibit 58

Annual Levy Support for Ohio Zoos Comparison Analysis - Based on the Levies Currently in Effect (All amounts in millions of dollars)			
Zoo / Taxing Authority	Type of Funding		Total Funding
	Operating	Capital	
Cincinnati Zoo Hamilton County	6.7	-	6.7
Columbus Zoo Franklin County	7.2	10.9	18.1
Toledo Zoo Lucas county	6.0	6.8	12.8
Akron Zoo - Note 1 Summit County	-	-	8.1
Note 1: The Summit County Zoo levy did not provide a break-out between the operating and capital portions of the levy.			

The Cleveland Metroparks Zoo is specifically excluded. It is operated by the Cleveland Metropolitan Park District which receives funds from a Cuyahoga County levy. The amount of funds allocated to the Cleveland Metroparks Zoo is not disclosed in the Park District's financial statements.

Although the amount of data is limited, the levy support provided to the CZ&BG for operating expenses does not appear to be out of the ordinary based upon a comparison of the operating expenses of other Ohio zoos.

IX. Possible Threats to the CZ&BG during the Next Tax Levy Period

Our concerns regarding the sustainability of the CZ&BG over the long-term relate mainly to the risks posed by the growing dependence on revenues generated by increased attendance to offset increased fixed operating costs, unfunded capital reinvestment and maintenance, possible decreases in gifts and donations, the recent spend down of already insufficient endowment funds and potentially insufficient planning by the CZ&BG's Executive Management Team to account for these and other risks in their planning process.

Funding requirements for future major maintenance projects, upgrades and refurbishments are expected to continue to increase. This puts pressure on the CZ&BG to find a consistent source of funds for these large and costly projects. Additionally, we believe Management's annual \$2.5 million budget for reinvestment is well thought out, but may in fact be on the low end of what is actually needed to fund both capital asset replacement needs and provide for the continually increasing animal care standards. According to our analysis, it appears funds are deployed for major maintenance projects, upgrades and refurbishments only after immediate needs have been met. This "linkage" between operating surpluses and reinvestment poses the risk that, should operating cash flows go negative, infrastructure will be neglected.

We believe there is a risk that future attendance will eventually become flat or decrease as the excitement associated with recent new exhibits fades or the park reaches maximum capacity. Hypothetical forecasts presented earlier in this report address this very risk and the potential negative impact appears severe. Over the last five-year period, escalating fixed costs have been outpaced by increasing revenues due in large part to increased attendance as well as increasing gifts and donations. This in turn has provided funding for much needed capital reinvestment and increased cash flows. In the event attendance becomes flat or decreases, capital reinvestment may need to be put on hold and operating expenses may need to be reduced.

We believe there is a risk that the current endowment fund is not strong enough to act as a safety net for the CZ&BG, in light of the recent expansion and increased fixed operating costs.

Risk that future expansion will make the CZ&BG more dependent on future levy funding, we believe there is a direct correlation between expansion and increased fixed costs. Without a stronger endowment fund in place, we believe additional expansion may make the CZ&BG more dependent on future levy funding.

The trend toward increases in Federal, State, Municipal, AZA and AAM regulations poses a risk that is also worth mentioning. Expansion of the regulatory strictures with which the CZ&BG must comply will likely continue. Conformity to such regulations will potentially entail even more increases in the CZ&BG's operating expenditures.

Regarding the risk of possible decreases in gifts, we would like to note that the past several years have seen a continued strong community support in the form of year-to-year increases in unrestricted gifts. Should the CZ&BG continue to enjoy high rates of gifting from its patrons, the risk posed by fluctuations in this funding source could be mitigated by the strict channeling of unrestricted gifts into the endowment.

Potential population shifts could affect the availability of future tax levy funds. During the years studied, the CZ&BG was highly reliant on the Hamilton County Tax Levy. Drops in Hamilton County population and/or decreases in property values could occur, impairing the CZ&BG's access to reliable public funding in the form of the levy.

X. Summary Findings

Our Summary Findings, listed below, group in one place each of the separate conclusions our Performance Review presents. Organized according to the section of the document from which they originate, these Findings should be read as references to the different sections to which they apply. (Because the Summary Findings pertaining to **VI. Financial Analysis** are numerous, we have grouped them within the categories of "Historical Trends" and "Projections over the Next Levy Term".)

Summary Findings pertaining to **IV. Corporate Structure**:

- *One of the Foundation Board's primary missions is to provide the Society with financial support in the form of increased endowment funds. However, to effectively succeed at this mission, the Foundation Board would need a voice in determining the direction of incoming unrestricted funds and the timing of their disbursement.*

Summary Findings pertaining to **V. Organizational Structure**:

- *The CZ&BG is performing well with respect to the corporate governance goals of an appropriate organizational structure, an efficient committee structure, and a high level of both accountability and transparency.*

The CZ&BG should consider offering easy accessibility to its Donor Privacy Policy, audited financial statements and Forms 990 on the CZ&BG website. The CZ&BG should notify Charity Navigator of this change, and its Accounting and Transparency should rise to four stars and the overall rating should also improve.

- *In the interest of long-term sustainability, we recommend the CZ&BG consider establishing a board-designated fund within the Foundation to fund the repayment of its outstanding bond obligations.*

Summary Findings pertaining to **VI. Financial Analysis**:

- *From 2013 to 2017, unrestricted working capital has moderately increased as a result of operating income surplus. If CZ&BG had not used \$2.0 million of unrestricted endowment funds, \$1.0 million in 2016 and \$1.0 million in 2017, for property acquisitions the unrestricted working capital would be even stronger. Management has indicated the use of funds for property acquisitions was part of a long-term plan and not a recurring transaction. It appears the CZ&BG has adequate current assets to meet CZ&BG's current obligations and contribute to long-term sustainability.*
- *The overall long-term financial strength of the CZ&BG has improved between 2013 and 2017. During this period, net assets with capital-related items excluded, increased by \$2.4 million, an indication the recent trend in overall long-term financial health is a favorable one.*
- *Expansion and new exhibits are paid for by donations generated through capital campaigns. With expansion and new exhibits comes increased future capital improvement and maintenance costs that must be paid for in large part by operating funds.*
- *The CZ&BG is a mix of both modern new exhibits and aging exhibits, and in many instances outdated infrastructure. Funding requirements for future major maintenance projects, upgrades and refurbishments are expected to continue to increase. This puts pressure on the CZ&BG to find a consistent source of funds for these large and costly projects.*

We believe Management's annual \$2.5 million budget for reinvestment is well thought out, but may in fact be on the low end of what is actually needed to fund both capital asset replacement needs and provide for the continually increasing animal care standards.

- *Measured from 2013 to 2017, annual direct operating losses before levy support, unrestricted gifts, and fundraising have decreased by \$1.0 million over the period. This is a strong indicator that its overall financial position is strengthening resulting in improved positive operating results; however, the CZ&BG remains reliant on unpredictable private support and on public (levy) support over this period.*
- *CZ&BG experiences increased attendance in years of a new exhibit or even a new animal as is the case of Fiona. These events have contributed to positive financial returns over the period reviewed. Management expects attendance to return to a normalized level after the Fiona phenomenon peaks in 2018.*
- *During 2015, 2016 and 2017, unrestricted endowment funds were used to fund capital expenditures as well as property acquisitions. During 2015, \$3 million dollars were used to fund the Africa project and during 2016 and 2017, a total of \$2 million dollars paid for properties adjacent to CZ&BG for future expansion. It appears these funds could have been utilized for necessary operating expenses or maintained in the Endowment and continue the momentum building a strong endowment fund. The choice to spend them in this way suggests the Tax Levy Contract's specification that the County's status as "the payer of last resort" for the CZ&BG could be in question.*
- *As noted in the working capital area, unrestricted endowment funds are being depleted. In the long term, CZ&BG may need to develop sources of unrestricted endowment funds. Considering the significant donations received for various capital campaigns, the potential to leverage those relationships to fund the endowment should be pursued.*
- *Salaries, wages and employee benefits account for approximately 50% of the CZ&BG's operating expenses. From 2013 to 2017, these expenses increased by \$3.7 million. The increase is due to 3% annual union and non-union raises, merit raises, and the hiring of approximately 20 more full-time employees.*
- *During the period in review, CZ&BG experienced growth with a number of major capital projects. Those projects resulted in a need for added expenses and increased attendance. However, in order to manage both the additional and expanded exhibits, a significant number of employees were added. More employees were not only needed for animal care, but also maintenance of the facility systems. Membership and park operations added FTEs to manage the stresses of the increased attendance whether it be parking, trash removal or first aid. During this period of growth, utilities expense has remained flat due to CZ&BG's efforts to find more economical and sustainable options related to their utility usage.*
- *Preliminary forecasts indicate that if attendance stabilizes at 1.6 million visitors and the current levy is renewed without an increase, the CZ&BG cash flows may remain positive but could decrease below the level required to fund capital reinvestment. Increasing the levy for inflation using a 5-year schedule partially mediates this result and increasing the levy for inflation using a 10-year schedule fully restores the CZ&BG's ability to self-fund capital reinvestment.*

Summary Findings pertaining to **VII. Operations Analysis:**

- *With respect to the Solar Array, CZ&BG:*
 - *Will purchase the Solar Array in 2018 for \$2.3 million.*
 - *Will incur new costs during the transition period.*
 - *Will assume some large expenses relative to the maintenance of the Solar Array.*
 - *Has no established plan relative to the funding of the purchase price.*

- Overall, the CZ&BG appears to have a safe, sophisticated, fine-tuned, and secure process for the handling of their cash receipts and negotiable instruments.

Summary Findings pertaining to **VIII. Benchmarking Analysis:**

- The CZ&BG operates using a business model employed by a large majority of its peers in the zoo community. Like many other zoos, the CZ&BG is privately-managed but relies on continued financial support from the public sector. Trends affecting zoos across the nation, including the CZ&BG, include:
 - Member visits make up an ever-growing percentage of attendance.
 - Costs for new exhibits continue to escalate, while the need to stay competitive with peer zoos in integrating new features drives zoos to build ever larger and more expensive exhibits. Expenses of zoo operations and exhibits are also driven by escalating AZA animal care, management and containment requirements.
 - Leadership recognizes the importance of staying flexible within a changing fiscal environment and of appealing to new types of patrons and funding sources as necessary.
 - The AZA, Zoos and their patrons increasingly emphasize the values of excellent animal care conservation and sustainability.
 - Efforts are directed at measuring outcomes and demonstrating quantifiable success.
 - Zoos as a whole are relying more on earned income and less on public and private funding than in the past.
- **AAA and Website Zoo Rankings:**

Six "Top Ten U.S. Zoos" websites were analyzed, and the CZ&BG was ranked in the Top Ten on three of these websites. Although these rankings cannot be considered truly objective, they are worth mentioning because they suggest the CZ&BG has a strong identity on the national as well as on the regional level. American Automobile Association (AAA) rates the CZ&BG as a "GEM" as they do for most of the other zoos and attractions in their analysis. A "GEM" rating in AAA tour books helps to attract reader attention to the CZ&BG as a place of interest to visit.

TripAdvisor ranks the CZ&BG as the #2 out of 189 top attractions in the Cincinnati Area, surpassed only by the Cincinnati Reds Great American Ballpark. Individual consumer rankings on the Trip Advisor website are very favorable with over 3,000 reviews and an average rating of 4.5 out of 5.0.

- The positive gap relationship between Direct Operating Revenues per Admission and CPI is a sign CZ&BG is theoretically less dependent on Tax Levy Funds.
- The Board of Trustees and the CEO of the CZ&BG appear to be effectively managing the total compensation of executive management personnel on a competitive basis that is conducive to sustainability and management continuity.

XI. Recommendations

Our recommendations are oriented toward the goal of long-term financial sustainability for the CZ&BG. With that end in mind, we first suggest that the Tax Levy Board examine two key provisions of its current contract with Hamilton County.

First, we believe that the definition of “qualified area expenditures” is too broad. The last contract with Hamilton County defined “qualified area expenditures” as direct costs of operating the Zoo in one or more of the following categories, as reflected in the Zoo’s financial records: Animal Operations, Animal Health, Environmental Services, Maintenance, Horticulture and Major Maintenance. We recommend Hamilton County remove “Major Maintenance” from the list of qualified expenditures. We suggest the following new contract language define “qualified area expenditures” as follows:

Direct costs of operating the Zoo in one or more of the following categories, includable as an expense in the Zoo’s audited financial statements; Animal Operations, Animal Health, Environmental Services, Maintenance, and Horticulture.

The concept of Major Maintenance appears to be hybrid between what is a maintenance expense vs. what is considered a capital expenditure under GAAP, however a clear definition is not presented in the contract with Hamilton County. Removing it will not impact the present levy funding, but will clarify the intent of the County to only pay for direct operating expenses and not Capital Assets.

The second provision of the levy contract deserving of review is the stipulation, within the current contract, that Hamilton County be treated as “the payer of last resort.” Although these words seem clear enough, the contract does not offer detailed guidance to the CZ&BG as how to comply with this stipulation. There are four distinct categories of funding that provide the vast majority of funding for the CZ&BG: operating revenues generated by attendance, earning from funds held in endowment, philanthropic support (gifts, grants and donations), as well as taxpayer funding (levy). The term Payer of Last Resort implies that the CZ&BG must first extinguish all other sources of funding before using the levy funds. Given the scope and nature of the operations of the CZ&BG, this is not a viable business model under which it should operate. The CZ&BG is a dynamic business that experiences seasonal cyclical variations and can encounter unforeseeable operating issues such as new AZA and USDA regulations, disasters and other unpredictable matters. It is sound business practice for the CZ&BG to maintain adequate unrestricted cash reserves and “rainy day” funds. This form of sound and fiscally responsible operating model has been adopted by many zoos across North America. Therefore, removing the stipulation that CZ&BG treat Hamilton County as “the payer of last resort” would in theory, be to both the County’s and CZ&BG’s best interest.

As the current expansion of the CZ&BG comes to a conclusion, we believe a long-term plan for the funding of future capital reinvestment be put into place and should take precedence over future expansion. A key provision of this plan should be an increase in the Foundation controlled endowment to a level that will provide earnings in excess of required annual capital reinvestment.

We recommend that steps be taken to provide for a more independently functioning Foundation. The current Foundation controls endowment funds that have been put in place for long-term future benefit of the CZ&BG. However, the CZ&BG can exert control over the Foundation through the selection of its trustees.

We recommend that management develop a strategic long-term financial plan to cover the next levy period as well as periods extending through the completion of any future expansions (including plans for the CZ&BG's 150th anniversary in 2025). A comprehensive strategic financial plan should be developed and updated at least annually for internal use and should also be presented to Hamilton County before the next levy request and during interim levy reporting periods. The strategic long-term financial plan should address the following areas that we believe pose considerable risk and uncertainty:

- Risk that future attendance will eventually become flat or decrease as the excitement associated with recent new exhibits fades or the park reaches maximum capacity.
- Risk that future revenue increases will not be able to keep pace with escalating fixed costs.
- Risk that operations will not be able to fund the capital reinvestment needed to keep the CZ&BG's existing and aging infrastructure operating in light of both the age and complexity of the existing park, as well as increasing animal care standards.
- Risk that the current endowment fund is not large enough to act as a safety net for the CZ&BG in light of the recent expansion and increased fixed operating costs.
- Risk that future expansion will increase fixed expenses to an unsustainable level. We believe there is a direct correlation between expansion and increased fixed costs.

We believe that one conclusion that could come from a meaningful strategic long-term financial plan is that the required capital reinvestment needed to keep the CZ&BG's existing infrastructure operating cannot be sufficiently generated by operating profits. If this is indeed the situation, the CZ&BG should seek additional funding through unrestricted fund donations and donor capital campaign funds or via the request for additional levy funds earmarked for capital infrastructure improvements.

XII. Appendices**Appendix A****A Summary of Audited Financial Statements**

The CZ&BG is audited annually by the certified public accounting firm Clark, Schaefer, Hackett. The following financial statement data is summarized from the CZ&BG's audited financial statements.

ZOOLOGICAL SOCIETY OF CINCINNATI AND CINCINNATI ZOO FOUNDATION, INC.					
Combined Financial Statements					
Year Ended					
Balance Sheet					
	3/31/2013	3/31/2014	3/31/2015	3/31/2016	3/31/2017
Assets:					
Cash and cash equivalents	\$ 1,529,494	\$ 1,493,979	\$ 3,732,741	\$ 4,419,813	\$ 3,946,413
Trade and other receivables	2,821,893	2,283,326	1,286,962	1,393,099	1,086,288
Pledges receivable, net	7,512,441	7,229,113	5,575,133	7,566,429	9,567,123
Prepaid expenses and supplies	244,589	781,915	317,757	301,115	339,374
Investments	22,685,846	28,590,385	26,199,923	16,779,536	19,614,567
Beneficial interest in trusts	3,458,316	3,557,130	3,532,727	3,142,784	3,218,704
Bond indenture deposits held by trustee	2,032,824	2,046,476	2,066,987	2,088,761	2,112,938
Bond issuance costs	32,802	29,614	26,426	141,264	-
Property and equipment, net	80,944,399	83,985,541	86,327,036	90,564,182	93,576,662
Total Assets	121,262,604	129,997,479	129,065,692	126,396,983	133,462,069
Liabilities and net assets:					
Liabilities:					
Accounts payable	2,737,834	4,063,713	2,493,431	2,391,377	2,901,324
Line of credit	4,500,000	4,000,000	-	-	-
Accrued expenses	2,857,891	2,562,267	2,713,721	2,490,335	2,419,475
Notes payable	2,898,000	7,775,000	11,665,000	7,355,000	5,200,000
Bonds payable	7,016,904	6,329,361	5,631,817	5,024,273	4,172,181
Capital lease obligations	-	-	-	-	-
Pooled income liability	36,415	33,112	27,469	27,010	26,524
Gift annuity obligations	241,391	260,012	165,240	115,919	113,014
Other liabilities	506,232	1,049,061	1,008,303	1,214,724	894,031
Total Liabilities	20,794,667	26,072,526	23,704,981	18,618,638	15,726,549
Net assets:					
Unrestricted	86,326,401	90,410,936	89,318,142	89,943,504	97,292,912
Temporarily restricted	11,377,827	10,738,877	13,261,577	15,068,875	17,665,319
Permanently restricted	2,763,709	2,775,140	2,780,992	2,765,966	2,777,289
Total Net Assets	100,467,937	103,924,953	105,360,711	107,778,345	117,735,520
Total Liabilities and Net Assets	121,262,604	129,997,479	129,065,692	126,396,983	133,462,069

Appendix A, continued:

A Summary of Audited Financial Statements

ZOOLOGICAL SOCIETY OF CINCINNATI AND CINCINNATI ZOO FOUNDATION, INC.					
Combined Financial Statements					
Year Ended March 31,					
Income Statement					
	2013	2014	2015	2016	2017
Unrestricted Revenues:					
Admissions	\$ 7,572,529	\$ 8,170,146	\$ 8,191,662	\$ 9,850,534	\$ 9,125,968
Memberships	6,857,685	7,299,244	7,855,554	8,710,833	9,249,136
Attractions	1,342,040	1,545,301	1,478,425	1,645,971	1,643,794
Parking	1,016,832	1,057,150	1,153,850	1,240,907	1,420,934
Programs	1,252,505	1,325,596	1,245,647	1,320,048	1,461,031
Commissions	1,706,781	1,895,233	1,929,405	2,261,675	2,085,859
Tax Levy	6,755,300	6,765,300	6,496,175	6,550,003	6,550,000
Rental income	410,619	462,094	532,465	355,517	242,917
Gifts, grants and donations	4,353,594	3,940,043	3,900,364	4,363,259	7,329,750
Investment income	38,226	29,978	41,419	39,966	35,487
Net realized and unrealized gains	(3,423)	(10,561)	(5,112)	(4,016)	(779)
Other income	365,684	432,833	407,671	556,508	616,648
Net assets released from restrictions	10,670,977	6,144,199	3,595,941	4,075,582	6,412,853
Total unrestricted revenues	42,339,349	39,056,556	36,823,466	40,966,787	46,173,598
Temporarily Restricted Revenues:					
Gifts, grants and donations	7,346,457	4,408,215	5,412,968	5,805,907	8,183,541
Investment income	-	-	-	-	-
Net realized and unrealized gains (losses)	-	-	-	-	-
Net assets released from restrictions	(10,670,977)	(6,144,199)	(3,595,941)	(4,075,582)	(6,412,853)
Total Temporarily Restricted Revenues	(3,324,520)	(1,735,984)	1,817,027	1,730,325	1,770,688
Total Revenues	39,014,829	37,320,572	38,640,493	42,697,112	47,944,286
Unrestricted Expenses:					
Programs:					
Animal care and health	(11,931,121)	(12,635,954)	(13,262,664)	(14,040,022)	(14,312,052)
Crew	(1,390,190)	(1,391,513)	(1,488,685)	(1,666,229)	(1,750,001)
Horticulture	(1,036,842)	(1,098,098)	(1,137,815)	(1,207,219)	(1,351,963)
Events and group functions	(4,845,775)	(4,778,660)	(4,896,564)	(5,394,486)	(5,089,078)
Membership and park operations	(4,099,192)	(4,736,201)	(5,184,558)	(5,579,561)	(5,741,462)
Education	(2,200,973)	(2,401,989)	(2,141,886)	(2,207,972)	(2,351,423)
Supporting services:					
Facilities and external property	(5,372,652)	(4,710,020)	(5,232,773)	(5,233,777)	(4,921,916)
General and administrative	(3,296,068)	(2,968,367)	(4,052,498)	(3,544,771)	(3,781,243)
Fundraising	(1,013,339)	(1,292,451)	(1,095,250)	(1,142,414)	(1,232,968)
Total expenses	(35,186,152)	(36,013,253)	(38,492,693)	(40,016,451)	(40,532,106)
Income (loss) from operations	3,828,677	1,307,319	147,800	2,680,661	7,412,180
Unrestricted Endowment Activity:					
Gifts, grants and donations	549,830	265,170	263,464	202,976	1,371,833
Change in beneficial interest in trusts	15,847	87,383	(30,255)	(374,917)	64,597
Investment income, net	223,491	213,341	162,153	141,427	113,311
Net realized and unrealized gains	555,665	594,277	316,532	(165,790)	270,760
Endowment expenses	(183,840)	(118,939)	(135,461)	(128,670)	(112,585)
Total endowment activity	1,160,993	1,041,232	576,433	(324,974)	1,707,916
Temporarily Restricted Endowment Activity:					
Gifts, grants and donations	63,261	149,982	96,838	83,963	21,496
Investment income, net	229,493	220,855	243,346	260,413	238,248
Net realized and unrealized gains (losses)	575,594	726,197	365,489	(267,403)	566,012
Total endowment activity	868,348	1,097,034	705,673	76,973	825,756
Permanently Restricted Endowment Activity:					
Gifts, grants and donations	-	-	-	-	-
Change in beneficial interest in trusts	13,183	11,431	5,852	(15,026)	11,323
Total endowment activity	13,183	11,431	5,852	(15,026)	11,323
Change in assets	\$ 5,871,201	\$ 3,457,016	\$ 1,435,758	\$ 2,417,634	\$ 9,957,175

Appendix B

CZ&BG's Response to 2013 HW&Co. Report

1. It appears that the CZ&BG may not be adhering to its property and equipment accounting policy as disclosed in its audited financial statements (prepared in accordance with U.S. GAAP). According to the policy, "expenditures for equipment, buildings and improvements made from the funds of the CZ&BG are capitalized at cost." During our review we noted numerous disbursements of the CZ&BG funds made for items recorded as major maintenance expenses which, it appears, should have been capitalized under the CZ&BG's "property and equipment" accounting policy. While the expensing of these items did not impact the CZ&BG's compliance with its contract with Hamilton County, we recommend the CZ&BG's future contract with Hamilton County stipulate that "costs incurred that extend the original useful life or increase an asset's future service potential should be capitalized." The goal of this recommendation is to improve the transparency and consistency of the financial reporting being provided by the CZ&BG to the readers of its financial statements.

The CZ&BG's response:

- *We have increased our capitalization threshold and have altered our process for capitalization of certain expenses. We believe these changes have resulted in a cleaner separation of what is capital vs. what is operating. In discussion with HW&Co. during this current review they noted the classification of these expenses was indeed much cleaner.*

2. We recommend that management review its capitalization policy and consider how this policy is being applied, especially as this relates to financial statement presentation and classification of major maintenance expenditures.

The CZ&BG's response:

- *As noted above we have increased our capitalization threshold and process for recording certain expenses. We are audited annually by an independent accounting firm who agrees with the approach we have taken.*

3. As the current expansion of the CZ&BG comes to a conclusion, we believe a plan for the funding of future major maintenance should be put into place and should take precedence over future expansion. The retirement of debt, too, should be a continued focus for the Board and a priority in the planning process.

The CZ&BG's response:

- *We have looked at our funding of major maintenance needs very closely and have begun to work into our budgeting process a \$1.5M line item for recurring maintenance needs related to our aging facility. In addition we identified the need for approximately a \$2.5M annual reinvestment fund to handle the major maintenance projects to keep up with the ever-increasing animal care standards and asset replacement needs.*

4. We recommend that steps be taken to provide for a more independently functioning Foundation. For example, Board-designated funds should be established within the Foundation to fund future major maintenance projects and to fund the potential purchase of the Solar Array in the event the CZ&BG decides to pursue that direction.

Appendix B, continued

CZ&BG's Response to 2013 HW&Co. Report

The CZ&BG's response:

- *The Zoo Board and Foundation Board are working together more to establish processes to aid in the growth of the endowment. Recently a change was made taking any unrestricted bequest received over \$100,000 and automatically sending 50% to the endowment with the other 50% going to the Board for disposition as to use. Prior to that change a full 100% of that bequest would have gone to the Board for determination of use. The Solar Array as well as other future projects are in our sight and we are making plans to handle purchase of the array in harmony with the payoff of other portions of debt.*

5. We identified five material contracts that, in the interest of transparency and compliance with US GAAP should be disclosed in the CZ&BG financial statements. The contracts identified that should be disclosed are the tax levy agreement with Hamilton County; the contract with AFSCME/AFL-CIO Ohio Council 8 (Union contract); the concessionaire agreement with Service Systems Associates, Inc.; the contract with Iwerks Entertainment Inc. to provide and maintain the CZ&BG's "4D" cinema attraction; and the solar power purchase agreement with CZ Solar, LLC.

The CZ&BG's response:

- *The tax levy agreement with Hamilton County, the Union contract, and the solar purchase option are all referenced in the notes to the financial statements from our audit firm Clark, Schaefer, Hackett & Co. The concessionaire agreement and the contract with Iwerks Entertainment are not however CSH is given all of those contracts for review and audit purposes.*

6. We recommend that the CZ&BG carefully quantify its options under the Solar Agreement to determine the likely estimate of the financial outcome based on future risks and its ability to fund a \$2.4 million capital addition in 2018. In addition, the CZ&BG should consider recording and/or disclosing, in its financial statements, the net discounted present value of any liabilities that may arise from the most likely outcome. For example, if the CZ&BG decides that it should exercise its initial purchase option, then it should consider recording the discounted present value of the \$ 2.4 million purchase cost and any other related purchase and/or financing costs.

The CZ&BG's response:

- *We have provided our intent in writing to Melink to exercise the option to purchase the solar array for \$2.3M on May 1, 2018. The array is outperforming the expected levels that were communicated to us at the start. We have focused on our paydown of debt in order to be in a position to take on additional debt related to this purchase if needed. We have spoken to our banking relationships with respect to that potential debt and they have let us know they are ready to assist when needed.*

7. Further, if the CZ&BG is giving serious consideration to exercising its option to purchase the solar panel array, it should consider establishing a board-designated fund within its Foundation to accumulate, over time, the capital necessary to pay for the purchase.

The CZ&BG's response:

- *As noted above our focus has been on reduction of existing debt to be in a position to take on additional debt related to the solar array purchase if necessary.*

Appendix B, continued

CZ&BG's Response to 2013 HW&Co. Report

8. We recommend that management develop a strategic initiative in response to our findings that both historical and projected direct operating expenses are increasing faster than both historical and projected direct operating revenues. While we commend management for positive trends in operating revenues and reductions in utility expenses, we recommend that a strategic initiative be put in place to reduce and further control direct operating expenses, including payroll, and to bring future increases in direct operating expenses in line with future growth in direct operating revenues.

The CZ&BG's response:

- *We have spent tremendous effort to constantly think of new and exciting ways to engage our visitors and drive additional revenue. Some of those new initiatives include exclusive behind the scenes tours, package options for admissions and membership, new and improved educational programs, more sponsorship opportunities and the use of social media to advertise and promote the Zoo in many ways. In addition we continue to focus on expense reduction in any area that we possibly can. With increased standards of animal care this is a constant challenge we face. Over the past 5 years we have been able to increase direct operating revenues by \$5M. Over that same 5 year period our direct operating expenses have increased \$4M. We continue to remain focused on this.*

Appendix C

CZ&BG Levy Renewal

CZ&BG Levy Renewal

Estimated Renewal Revenue - see Assumptions below

Source: Hamilton County Auditor's Office

(adjusted for rounding to Total Levy Renewal amounts)

Tax Year	2013	2014	2015	2016	2017	
Calendar Year	2014	2015	2016	2017	2018	Total
	Mills					
	0.46					
Renew						
Real Property & Public Utility Taxes (0111)	\$ 5,963,455	\$5,995,495	\$ 6,026,274	\$ 6,058,322	\$ 6,090,370	\$30,133,915
Rollback & Homestead (0142)	632,852	634,660	636,469	638,278	640,087	3,182,345
Public Utility PP Reimbursement (0143)	0	0	0	0	0	0
Tangible PP Reimbursement (0141)	0	0	0	0	0	0
Total Levy Revenue - Renewal	<u>\$ 6,596,307</u>	<u>\$ 6,630,155</u>	<u>\$ 6,662,742</u>	<u>\$ 6,696,599</u>	<u>\$ 6,730,457</u>	<u>\$33,316,260</u>

Assumptions:

- (1) The levy terms are renewed, for a five year term, the same as the existing levy.
- (2) The calculations are based on 96% of the current real estate property duplicate with a conservative estimate for new construction each year.
- (3) The current cost of the Zoo levy for a \$100,000 market house is \$10.60

The cost calculated for the \$100,000 home includes:

- 10% rollback
- 2.5% homestead credit
- Current sales tax credit (which may vary depending any changes to the sales tax credit each year

Appendix D

Strategic Plan Document



Cincinnati Zoo & Botanical Garden - One Page Strategic Plan® (OGSP®) v8.0 FY 2017-2019

Mission: Creating Adventure, Conveying Knowledge, Conserving Nature, Serving Community

Vision: Inspiring Passion for Nature and Saving Wildlife for Future Generations!

FY 2017-19 OBJECTIVE:

'What' is Winning ...

Inspire and connect every visitor with wildlife every day, to engage and cultivate a healthy and sustainable future

GOALS: (Owner: Voss)

FY End 3/31

	FY17	FY17	FY18
Visitor Satisfaction			
Overall Satisfaction	88.1%	75.0%	75.0%
Net Promoter Score	89.8%	80.0%	80.0%
Ops Net w/ Releases	\$5,263,621	\$2,597,258	\$2,600,000
Impact on Cash	\$654,886	\$500,000	\$500,000
Attendance	1,629,477	1,450,000	1,450,000
# Members	877,607	750,150	750,000
% Members	53.9%	51.7%	51.7%
Member Renewal Rate	57.7%	60.0%	60.0%
Per Cap Measures			
Admissions/Rides/Park	\$5.50	\$5.50	\$5.50
Retail (gross revenue)	\$1.66	\$1.66	\$1.66
Food (gross revenue)	\$4.26	\$4.26	\$4.26
Group Sales Revenue	\$4,110,610	\$3,706,963	\$3,200,000
Total Exp Pkg Sales	23.0%	20.0%	20.0%
Education Schools	84,969	73,800	75,000
Field Trip Attendance	\$479,179	\$492,995	\$500,000
Outreach Attendance Revenue	90.0%	70.0%	80.0%
Educ. Public Programs			
Attendance	14,898	17,080	17,000
Revenue	\$820,804	\$874,695	\$875,000
Net Promoter Score	89.0%	70.0%	80.0%
Operating Contributions	\$3,174,188	\$3,219,007	\$3,220,000
Capital Contributions	\$5,503,212	\$5,000,000	\$5,000,000
Sponsorship Revenue	\$1,262,129	\$1,384,780	\$1,400,000
Carbon Footprint			
Total Utilities Expense	\$1,126,326	\$1,405,000	\$1,400,000
Electric Use (kwh)	8,922,865	9,397,590	9,300,000
Natural Gas (ccf)	198,354	271,429	270,000
Water Use (gal)	49,234,766	55,168,877	55,000,000

STRATEGIES: (Captain)

'How' we will Win ...

1. Animal Excellence (Lessnau)

Establish a comprehensive approach to animal excellence designed to promote positive welfare in nutrition, environment, physical health, behavior and mental state of the animals in our care.

2. Making the Zoo Accessible & Inclusive for All in the Community (Hoeweler) Advance a multi-faceted ACCESS initiative to make the Zoo experience available to everyone in our community.

3. Build an Internal Culture of Positivity (Walton) Drive and support a culture of positivity and employee engagement that will inspire the current and future success of the Zoo.

4. Conservation and Cultivating Community (Fisher) Advance global leadership in wildlife conservation and inspire local engagement in conservation and sustainability.

2016 PLANS: (Owner, Date) [Relative Priority: A,B,C]

- 1a) Update collection plan with special emphasis on conservation impact / sustainable populations, appropriate facilities and enhanced visitor experience
- 1b) Build an initiative that pilots an evidence-based approach to animal wellbeing, one that complements the existing art of animal husbandry
- 1c) Create a comprehensive browse program that meets the growing needs of the collection
- 1d) Establish a comprehensive operant conditioning (OC) program that is overseen by a management committee
- 2a) Establish a long-term sustainable partnership with the CCHMC to open the doors of accessibility to families supporting members with developmental disabilities
- 2b) Research & Implement best practices for attracting a more diverse audience.
- 2c) Establish a discounted ticket/member venture that allows corporate sponsors and individual ticket purchasers to support access opportunities for others in need in our community.
- 2d) Improve the physical accessibility of the Zoo to achieve increased attendance goals, including an economically sound solution to parking and an ideal gateway experience.
- 2e) Search out opportunities to gather and analyze data and metrics on current diversity statistics to understand benchmarks and define future opportunities.
- 3a) Create and drive culture of personal & professional growth & development i.e. performance evals, growth plans, training & development.
- 3b) Develop & invest in programs of excellence – Leadership Academy, Leadership Challenge, Organizational Development.
- 3c) Evolve and effectively manage the Zoo's Total Rewards Program – i.e. key partnerships, benefits management.
- 3d) Strengthen relationships with individual board members to better utilize their passion and strengths in service to the zoo and our community.
- 3e) Drive continued focus on and improvement of employee engagement across the zoo – hire for attitude as well as competency, hiring/onboarding, culture of giving/innovation.
- 4a) Engage our visitors/members in a focused local conservation activity.
- 4b) Effectively produce and share the impact and relevance of our conservation stories to continue to deepen our relationship with our local community and those connected to our work.
- 4c) Advance the ability of individuals to "re-wild" their surroundings and community through shared experiences and relationships formed with the zoo and our employees.
- 4d) Utilize the monies provided by the Duke Class Benefit Fund to complete the transition of the zoo campus to achieve 100% LED, provide 1500 homes in Avondale an upgrade to LED lighting, and supply outdoor lighting in some of the trouble spots in the Avondale neighborhood.

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Process Owner: Hoeweler

Appendix E

Tax Levy Flyer



CINCINNATI ZOO TAX LEVY



For 35 years, the citizens of Hamilton County have been a critical partner in developing the Zoo into the world class institution, accessible to everyone, that it is today.

KEY FACTS

- 1** **1.6 MILLION VISITORS**

The Zoo Levy helps keep the Cincinnati Zoo affordable for everyone!
Nearly 800,000 live in Hamilton County.

Annually
365
- 2** **Levy funds only go to Basic Zoo Needs.**

New habitats like Fiona's hippo pool are funded by private donations.


- 3** **The current Zoo Levy is the smallest levy in Hamilton County.**

\$10.41/\$100k


- 4** **Good steward of taxpayer dollars**

Sustainability efforts have saved \$10.4 million on utilities and one billion gallons of water over the last 10 years - money that's reinvested into infrastructure.




- 5** **The Cincinnati Zoo has a significant and beneficial impact on the area.**

providing a **\$143,000,000** annual economic impact to our region (2012 UC study)

350% Return on Investment (generated via operating expenditures)

Appendix E, continued
Tax Levy Flyer

