



Milwaukee County Zoo Overall Master Plan

Stage 2 Report
December 11, 2013



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Executive Summary

In August of 2011, the Milwaukee County Zoo began a zoo-wide Master Plan by commissioning the Analysis Phase, or first step in the master planning process. PGAV Destinations completed this work, and was then hired, along with Schultz & Williams, to complete the Master Plan in two stages. This document is the final result of the Analysis, Stage 1 and Stage 2 of the 2013 Master Plan for Milwaukee County Zoo.

The Master Plan itself is divided into three sections: Analysis, New Products, and Implementation.

In the Analysis Phase, PGAV documented key findings with staff and stakeholders, examined the physical site and key statistics, evaluated business success and brand, and synthesized these findings into goals and strategies for the master plan.

Based on these goals and strategies, PGAV and Schultz & Williams developed new products to address the Zoo's future needs. New products included animal attractions, revenue opportunities, non-animal attractions, and general design guidelines for all future developments. Each of these products were created with sound business planning, great guest experience, and operational efficiency in mind.

Finally, an implementation plan was created based on the highest priority needs of the Zoo along with funding strategies to ensure fundraising success.

This master plan looks to the long-term future of the Zoo, planning major projects for twenty-five years, by providing a platform to illustrate success to the community in the relative short-term of the first five to ten years.

Analysis

Summary

The Analysis Phase is an essential component of the Master Plan development because it allows us to understand who the Milwaukee County Zoo is today. In this phase, we delved into the background of the Zoo, talked with the staff and key players, examined the physical layout of the Zoo, and crunched the revenue numbers.

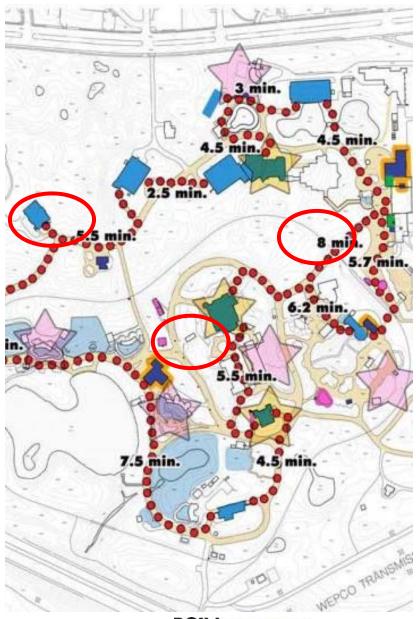
In the Analysis Phase, questionnaires were sent to each department, followed by interviews. Key findings include goals for the future, perceptions, complaints, challenges, and priorities over the coming years.

Quantitative studies of attendance, effects of weather, guest experience organization, circulation, service access, star animal locations, business evaluations and revenue locations were also documented. Other subjective observations were made about wintertime appeal and visual attractiveness, along with SWOT and brand exercises.

The Analysis Phase also included consumer testing in the form of internet surveys about attitudes and usage of the Milwaukee County Zoo; with responses from members, visitors, and non-visitors. The survey explored motivational attractions, spending habits, guest satisfaction, pricing strategies, and likelihood to contribute to conservation programs.

Finally, all of the above research was synthesized and formulated into Goals and Strategies for the Master Plan.

Overall, the strength of the Zoo lies in its identity as a 'natural parklike' experience providing family fun at a great value. In order to ensure long-term success, the Zoo must continue to build this brand by improving wayfinding and animal visibility while at the same time increasing operational efficiency and modernizing exhibits and experiences to ultimately increase revenue generation and strengthen conservation initiatives and awareness.



Goals and Strategies

Goals

The following are the Goals and Strategies developed for the Master Plan.

Goal #1:

• Become Financially Sustainable

Goal #2:

Become the Fun, Family, Educational, Regional Attraction and Destination of Choice in the Midwest

Goal #3:

• Enhance and continue to be Recognized for Wildlife and Conservation Efforts

Goal #4:

• Continued Excellence in Animal Care

Strategies

1. Refocus the Brand

- Deliver on "Good Family Value" & "Quality Experiences"
- Differentiate based on the Park-like Atmosphere ... Year Round
- Bring Mission to Forefront ... Interpretive Master Plan focused on Conservation Programs

2. Strengthen Guest Experience

- New Exciting Attractions
- Modernize or Replace Exhibits ... Incorporate more Interaction
- Enhance Entry and Exit Experiences
- Increase Quality Revenue Opportunities
- Enhance Ease of Wayfinding
- Develop Greater Inclusive Demographic Appeal
- Highlight and enhance botanical features of site

Goals and Strategies

3. Increase Revenues

- Increase Attendance
 - Exciting New / Renovated Exhibits, **Attractions & Experiences**
 - Capitalize and Grow in warm Fall / early Winter... Facilities / Marketing / Festivals
- Increase Sales
 - Improve Retail Opportunities
 - New Paid Attractions or Rides
 - —Add Special Interactions / Experiences
 - —Additional Flexible Multiuse Spaces
- Increase Fundraising
 - Public & Private

4. Increase Operational Efficiency

- Address Aging Facilities
- Improve Coordination between and within Zoo & ZSM Departments
- Separate Service Operations from Guest Experience

5. Strengthen Animal Core

- Improve Animal Care
 - Enhance / Replace / Add Animal Service
 - Update Animal Care Technology
- Enhance Animal Exhibition
 - Propagate Strategic Species for Longterm AZA Population Management
 - Enhance / Replace / Add Innovative **Animal Exhibits**
 - Incorporate Education on Animal Behavior and Natural History into Exhibit Experience more Effectively

6. Focus on Conservation

- Link Exhibits to Conservation Programs and
- Increase and Exhibit In-House Green Practices
- Increase Zoo Conservation Programs Worldwide
- Inspire and Provide Opportunity for Guest Involvement in Conservation
- Highlight and Celebrate the On-Site Mature Forest
- Manage Invasive Botanicals On-Site
- Educate Guests about Conserving Wildlife Habitats

Analysis

Departmental Interviews: Key Findings

Operations / Business (Food, Retail, Special **Events, Admissions)**

1. Per Cap Revenue

- Enhance Existing (Food, Retail, Rides, Interactions)
- More Area / Opportunities
- Indoor Space for Groups

2. Admissions Revenue

- Enhance the perceived product to support higher prices
- Simplify pricing
- 3. Replace Parking that will be lost
- 4. Wayfinding Challenges
 - Guest Satisfaction
 - Enhance Revenue

5. Animals

- More Animals On View
- Keeper Presence Throughout Zoo

Administration & HR

- 1. Stable Funding
 - County Budget Impacts
 - Revenue Generation
- 2. Increasing Attendance

Departmental Interviews: Key Findings

Marketing

- 1. Financially Sustainable / Self Sufficiency
- 2. WOW! / Creative / Innovate / Grow
 - New Product
 - What's New? / More Animals / Marketable Attractions
 - Brand / Marketing
 - FUN Successful Conservation Attraction / Organization
 - Public Perception = "Great Zoo" vs Increase Attendance & Revenue
 - A Regional Attraction at World Class Quality
 - Conservation Program Awareness
 - Balance Mission / Vision
 - Address Facility Issues

Steering

- 1. Increase Attendance ... to 1.35 MM and beyond
 - Unique New Product (Hippos, Elephant, Giraffe, Herds, Bears, NA?)
 - Clarify / Expand Brand Awareness
 - Innovative Advertising
 - Social Media
 - More than Families ... Young Professionals and **Empty Nesters**
 - Recognition (Interest In) of Conservation Efforts
 - Winter Attendance (Does Minnesota Work?)
- 2. Address the Milwaukee Market
 - Frugal, Active and Outdoors

Departmental Interviews: Key Findings

Zoological

1. Improve Visitor Experience

- Address Tired Look
- Accommodate Guests seeing More Animals
- Enhance Animal Presentations
- Zoo Circulation; Long Confusing Walks

2. Enhance Welfare of Animals

- Enhance Outdated Facilities
- 3. Address Staff Support Facilities
- 4. Strategic Conservation Programs
 - Bonobo, Breeding, Elderly, Caribbean, Dental Work ... What Next?
 - Build on the Walk in the Woods
- 5. Technology Advancement

Facilities / Horticulture

- 1. Facilities Maintenance Budget
 - Upgrade / Repair Utilities, Facilities and Exhibits
 - South Support Improvements
- 2. Resource Management Plan
- 3. More Attractions
 - Splash Pad
 - More Interactions in the Farm

Departmental Interviews: Key Findings

Conservation Education

1. Develop the Interpretive Plan

- Want to Tell a Story
- Enhance the Conservation Story
- Green is not Powerful
- Path Widths Detract from Walk in the Woods

2. Program Spaces

- Strong School Programs
- Indoor Space for Overnights
- Shaded Theater
- Indoor School Group Lunches

Conservation & Research

1. Increase awareness of Zoo programs

- Link to Education Programs
- Link to Interpretive Master Plan

2. Increase impact on world conservation

- Enhance Contributions to In-Situ Programs
- Enhance Conservation Research Programs

SWOT Analysis

In order to understand who Milwaukee County Zoo is currently, the master plan team performed an analysis of the Zoo's Strengths, Weaknesses, Opportunities and Threats ("SWOT Analysis"). The results of this discussion are below:

Strengths

- 1. Reputation
 - Strong membership base
 - Strong education and conservation programs
 - State of the art vet facility and program
 - Local economic driver
 - Strong volunteer base
 - Staff as quality leaders
- 2. Site
 - Woodsy, park-like look and feel
 - Cleanliness
 - Many indoor experiences
 - Location near city and interchange
 - Availability of group event spaces
 - Safety
 - Sample existing parking
 - Lots of undeveloped land
- 3. Varied Experiences
 - Diverse collection with many charismatic species
 - Bonobo exhibit

- Non-traditional special events
- Repeatable experiences
- Farm and relationship to WI
- 4. Relationship between Zoo and Society

Weaknesses

- 1. Infrastructure
 - Lack of animal support space
 - Deferred maintenance
 - Aging utilities, buildings, exhibits
 - Lack of service roads
 - Inefficient vehicle entry
 - Parking safety challenges
- 2. Guest Experience
 - Non-cohesive overall experience
 - Poorly coordinated cons./ed. programs w/ general visitors
 - Confusing circulation / wayfinding
 - Confusing building entrances
 - Low indoor capacity of exhibits
 - Weak main zoo entry experience
- 3. Internal Staff Dynamics
 - Lack of coordinated marketing efforts
 - Lack of coordinated educational programs
 - Lack of communication between and within Departments



SWOT Analysis

Opportunities

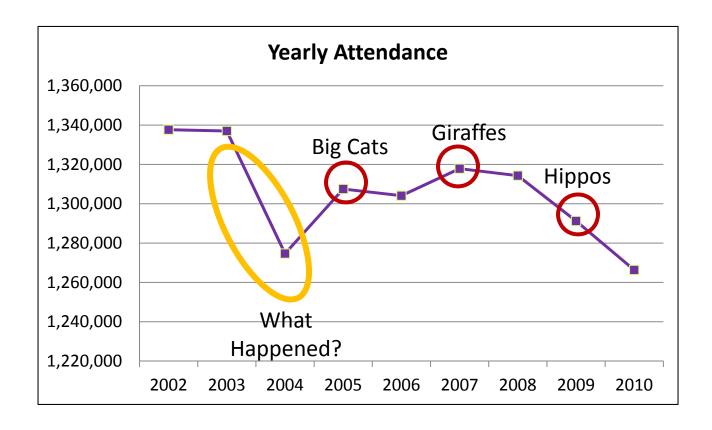
- 1. Take Action with a Vision
 - Create new funding model
 - Focus on mission
 - Enhance Society and Zoo relationship
 - Increase staff diversity
 - Improve community awareness
 - Increase impact on world conservation
- 2. Improve Guest Experience
 - Create Golden Moments
 - Make cohesive experience
 - Utilize natural woods
 - Take advantage of Lake Evinrude
 - Nature call to action
 - Improve guest service
 - Develop botanical aspect and integrate arts
 - Utilize Bliffert property
 - Improve wayfinding with new interchange

Threats

- 1. Funding
 - Misconception of financial health
 - Competition for public's limited resources in bad economy
 - Instability of local government funding
- 2. Potential Pitfalls
 - Maintaining status quo
 - Wandering from mission
 - Lack of action related to trends
- 3. Unpredictable Local / National Economy
- 4. Instability of Animal Populations / Species Availability

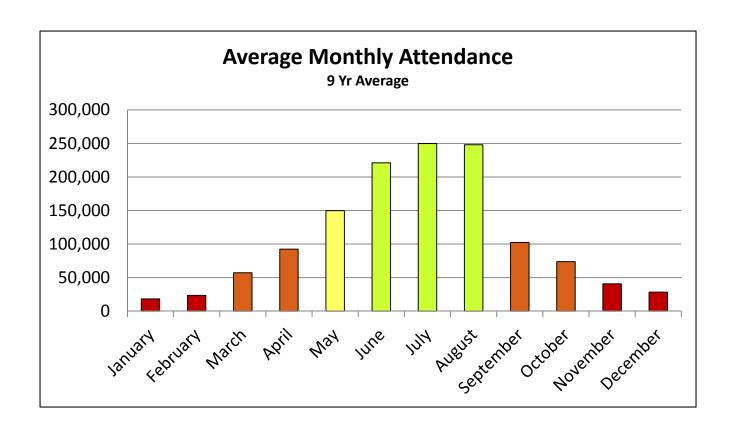
Attendance

- 9 Yr Overall Growth Rate: -5.3%
- Max. annual growth rate: +2.58% in 2005
- Nationally, 2009-2010 growth rate of -0.6% after overall increases in 2008-2009



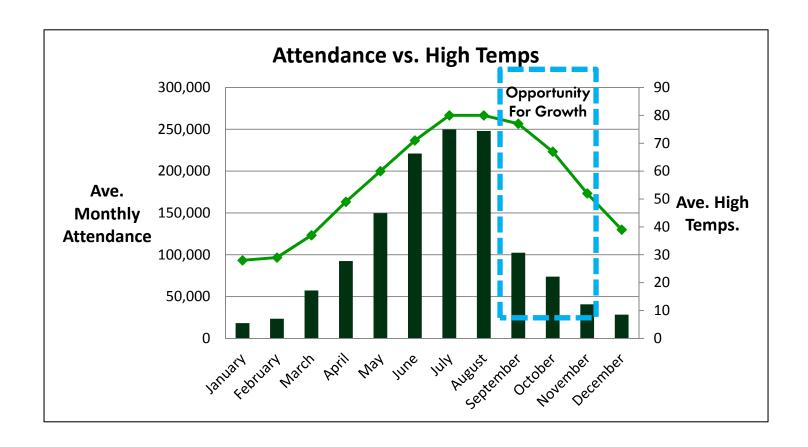
Annual Monthly Attendance

- 3 Month True Season (June-Aug)
- 5 Month Shoulder Season with May fairly strong
- 4 Month True Off-Season (Nov-Feb)



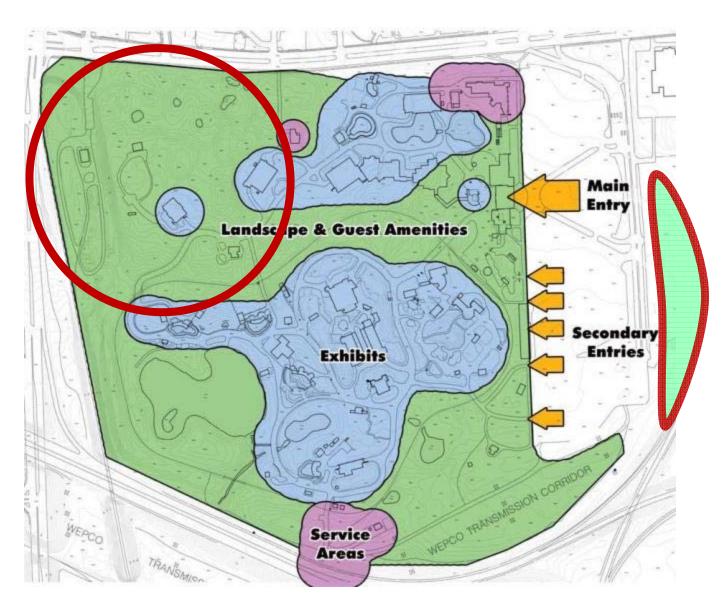
Effects of Weather on Attendance

- As temperatures increase in spring, so does attendance
- Weather Opportunity in fall. Events?
- September is as warm as June and July but sees <1/2 attendance



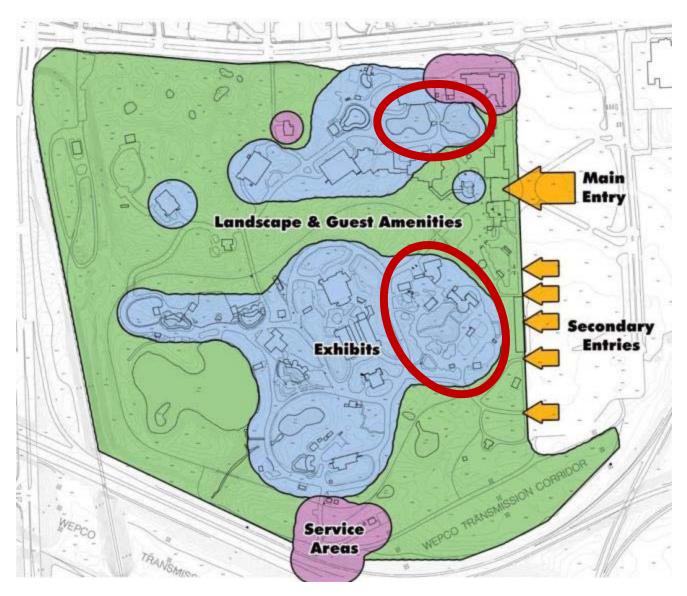
Overall Organization

- Two Disconnected **Exhibit Areas**
- NW Corner Ideal for Expansion
- Loss of Overflow Parking to HWY Project



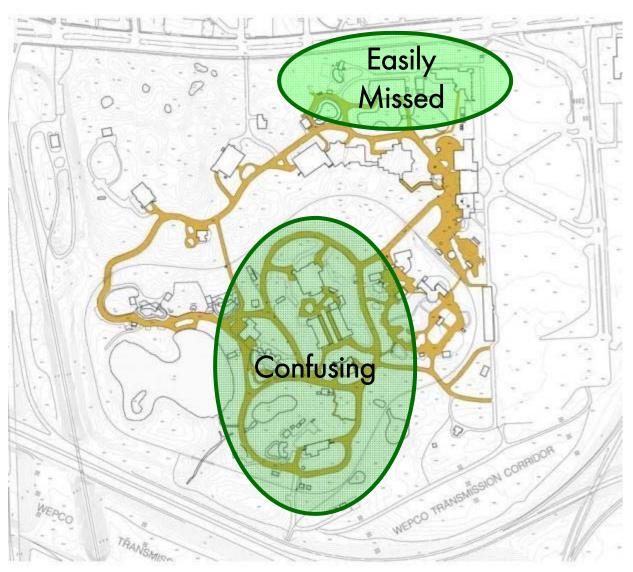
Entry Experiences

- Penguin Exhibit Closest to Entry ... Small Scale
- Farm Exhibit and Wading Birds ... Next Closest



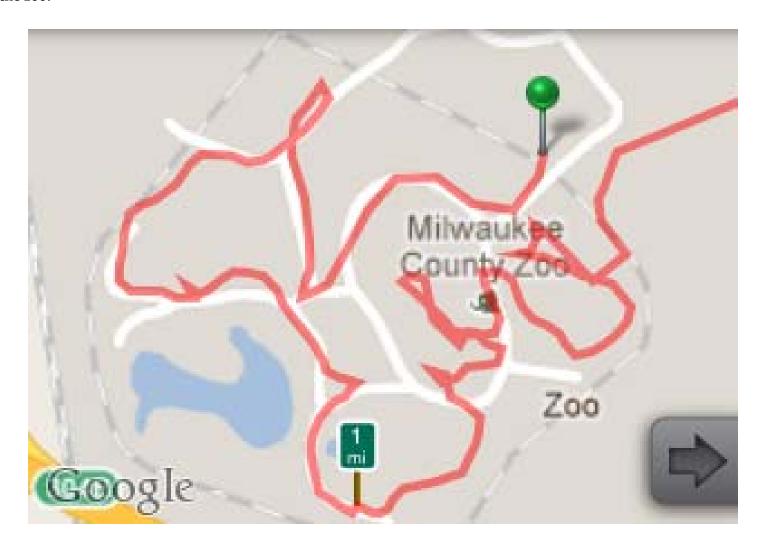
Overall Guest Circulation

- Convoluted Loop that misses many elements:
 - Sea Lion-Aviary / **Primates**
 - Inner / Outer Africa Asia
 - North America
 - South Loop
 - Farm
- Confusion in South Side



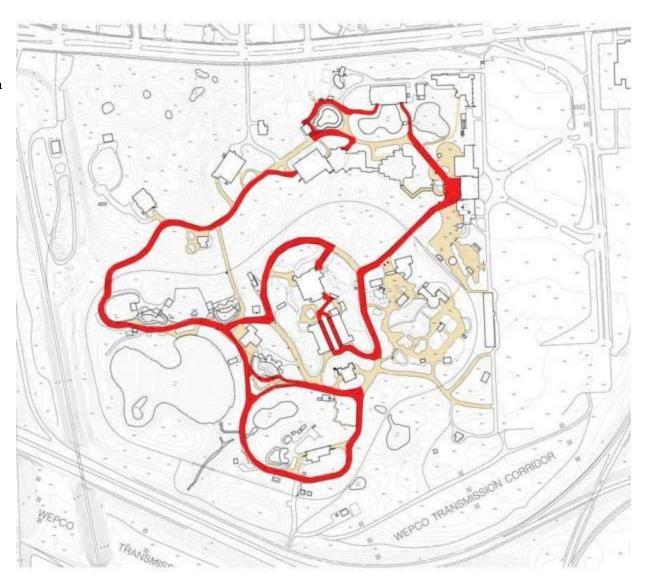
A Day at the Zoo

The following is a GPS recording of a guest's actual walking path while trying to see all of the exhibits in the south half of the zoo.



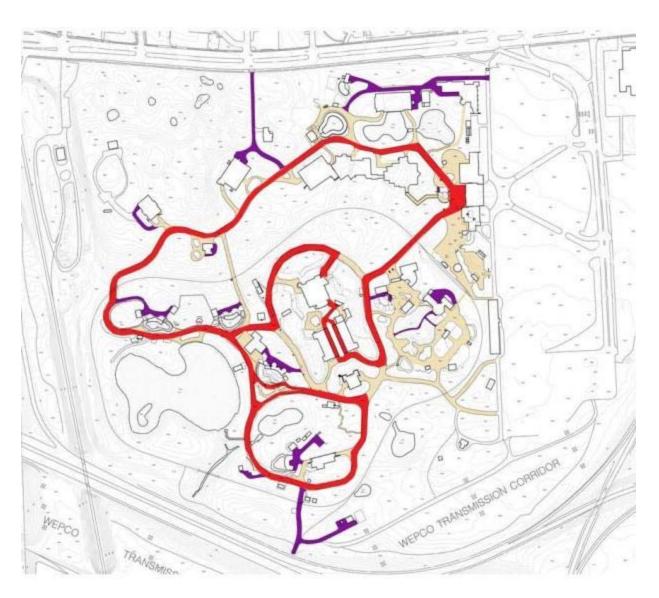
Main Guest Path

- Possible existing Main Path to hit most exhibits
- Some doubling back especially on South Side
- Route not clearly evident on site



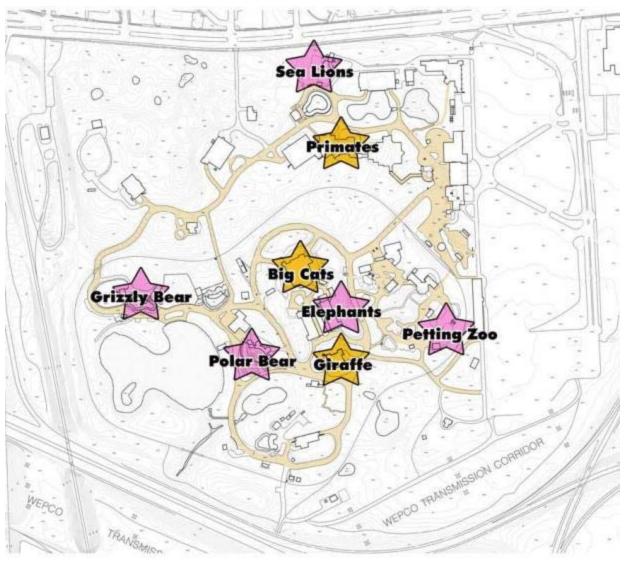
Service Access

- Three service access points into zoo
- Limited internal service corridors; therefore, access on Guest Path



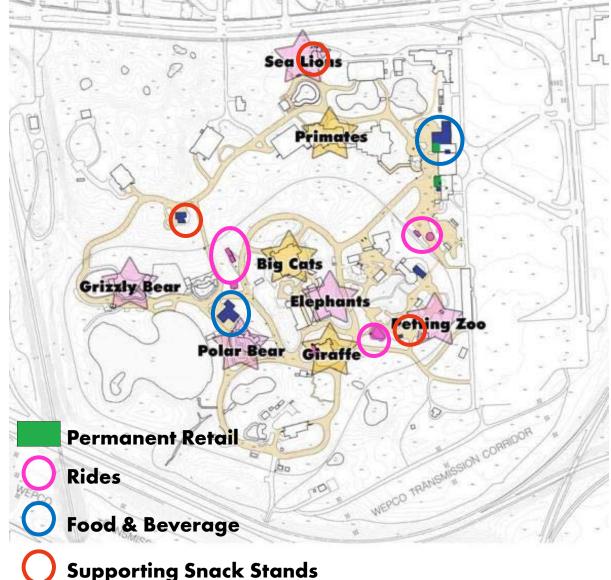
Star Locations

- Stars NOT evenly distributed across Zoo
- Under-delivering on Stars
 - Elephants, Bears, Sea Lions Exhibit
 - Limited Petting Zoo Touch



Revenue Locations

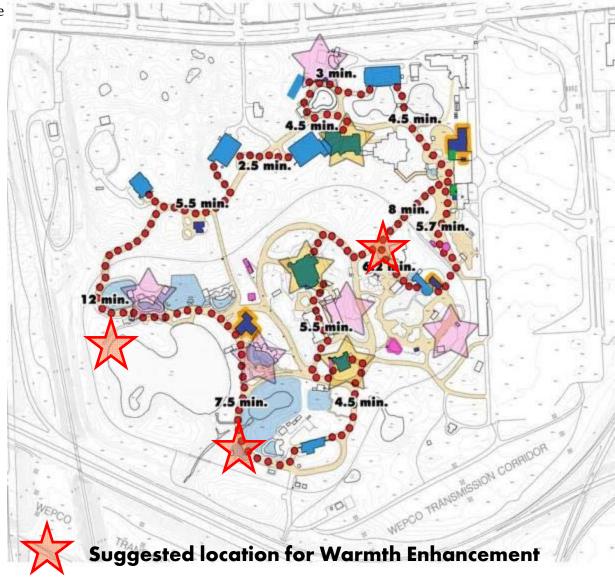
- Generally located well with proximity to Stars
- Permanent Retail only at Exit
- Main F&B at opposite sides of zoo with Supporting snack stands in between
- No Rides at North Side





Winter Zoo

- Winter appeal spread across site
- North side pacing seems adequate
- South Side "Warming Stations" needed to break long walks
- Indoor F&Bs located well



Visual Appeal

Exteriors of Indoor Exhibits are not inviting or intriguing (even when the interiors are very nice!)



Greenspace

The Milwaukee County Zoo's site benefits from relatively large and somewhat contiguous wooded areas. Some of these areas are old growth native deciduous forests which contain ephemeral ponds that provide critical breeding habitats to native amphibians and other wildlife. The other wooded areas, although secondary growth and intentional landscaping, support the Zoo's overall brand and character. As the Zoo grows over time, these forested and landscaped areas must be carefully considered and selectively protected.





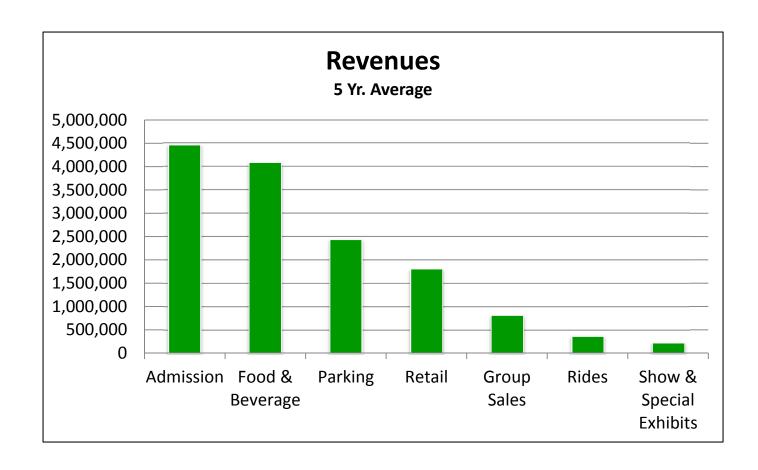
Native Old Growth



Non-Native / Secondary Growth

Revenues

- F&B revenues strong
- Retail has room to grow



Admissions

Based on a recent cultural attraction trend report (2013), **admission prices continue to increase by roughly 5% a year**. In 2012, the average adult admission cost was \$13.10, and the average child admission cost was \$8.95 – over 92% of the 227 participating institutions charge an admission fee. For zoos, adult admission to Zoos increased by 4.3% (average of \$12.72 for adults) and child admissions increased by 6.2% (average of \$8.93 for children).

Currently, the Zoo charges peak (April – October) and non-peak admission pricing structure with non-County adults paying \$14.25 in peak and \$11.75 during non-peak; County resident adult fees are \$12.50 during peak and \$10.00 during non-peak. Non-County child rate is \$11.25 in peak season and \$8.85 during non-peak; the County resident child rate in peak season is \$9.50 and \$6.00 during non-peak. Both the Zoo's current adult and child rates are slightly above the average admission fees for zoos as of December 2012.

Based on the Milwaukee Zoo's 2011 research study, survey **respondents were supportive of a price increase from \$14.95 to \$16.95** for adults – the respondents indicated that with new product additions (new animal exhibits and/or visitor experiences/amenities), there is willingness to increase the cost of admission.

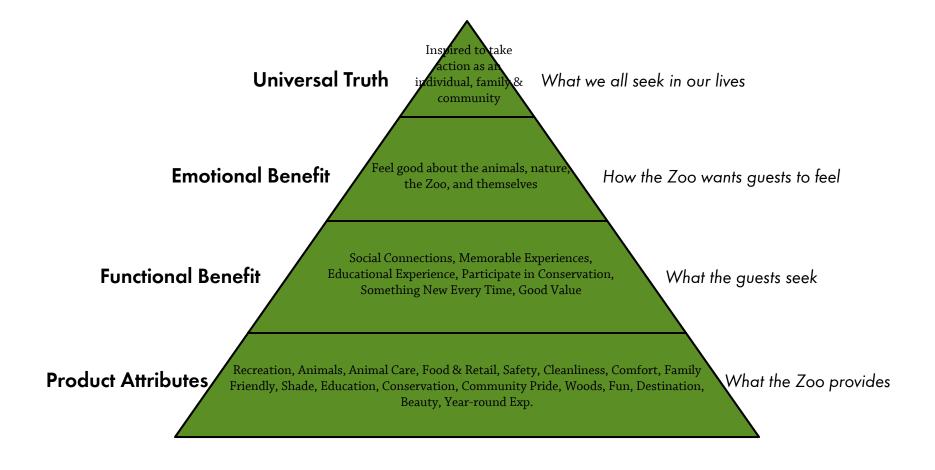
Based on the Zoo's 2012 actual visitation of 1.33MM visitors, and assuming that the Zoo/Society continues to invest in quality animal exhibits and visitor amenities while offering high value for the visitor experience, the **Zoo's baseline annual attendance will likely grow over the next ten to twenty years to over 1.6MM visitors annually**. Society members will account for over 50% of the Zoo's attendance.

Adult and Child Rate Changes from 2013 Cultural Survey

	Adult	Child
	Admission	Admission
2003	5.9%	5.6%
2004	5.1%	6.6%
2005	5.7%	7.2%
2006	6.6%	9.1%
2007	4.4%	6.3%
2008	6.6%	5.3%
2009	5.9%	6.4%
2010	4.8%	4.9%
2011	4.7%	5.1%
2012	4.7%	3.6%
Change		
Since 2003	54.4%	60.1%

Brand Pyramid

A Brand Pyramid Study was conducted with the Steering Committee which considered the existing and aspirational attributes of the institution. Below is the desired Brand Pyramid for the Zoo.



Market Research

Online Survey: H2R Research

- E-mail survey of 1,019 MCZ visitors from the past 12 months, 179 who visited MCZ more than a year ago and 125 non-visitors; Completed Nov. 2011
- Results:
 - Visit driven by "family time" & "see new animals and exhibits"
 - Guests are frugal, but WILL pay for quality experiences (ie 70% visited Disney)
 - Perceived as very good experience ("best in US") and tops local attractions
 - Favorite animals: Big Cats and Great Apes; Least fav.: Hoofstock, Australia
 - Sharks and Polar Bears most motivational new / updated exhibit ideas
 - If these were added, 2/3 would return, 60% would come for the 1st time
 - \$2 price increase has little affect; Conservation fee is not well understood
 - Adding 'New Exhibits' and 'Behind the Scenes Tours' increases visits and length of stay
 - Guests are aware of indoor exhibits for winter and 62% are open to visiting during the winter



Market Research

Exit Polling Research: Lukas Communications

- 300 in-person interviews completed October 2011
- Results:
 - 50% overall are first timers; 78% from Illinois are first timers
 - Visited because the zoo is "fun and enjoyable" and "family time"
 - Least popular reason is "zoo is good value"
 - 88% think the zoo is educational
 - Zoo pass holder attendance is higher this year than last
 - Visitors spend their money on food (42%)
 - 90% indicated they'd be back in 2011
 - 50% reported 3-5 hour length of stay
 - Only 13% experienced Kohl's Wildlife Theater (lack of awareness)

New Products

Summary

The Milwaukee County Zoo currently cares for an impressive, wide variety of animals. However, many of the exhibits are outdated and / or do not allow the high level of guest experience for which the Zoo strives.

The bulk of the new products are anchored by re-imagined experiences for animals already at home in the Zoo. These animal attractions are supported by various revenue opportunities, including major renovations of existing buildings along with several new experiential food and retail venues. Additionally, several options for guest amenity attractions, such as a splash pad, enhance the zoo visit and increase the visitor stay-times.

A major component of the new product development is the creation of a singular main path along with strategically improved service access paths. By working to strengthen wayfinding through both a clear, enhanced main path and separating service from guest areas, guests will be able to visit the entirety of the Zoo with minimal orientating or backtracking. Both of these circulation plans will be implemented on a project by project basis—building over time.

An additional strategic component of the new products is the consideration of a true, marketable Winter Trail. The development of this Winter Trail is achieved both through the new products as well as through a well conceived marketing campaign, wayfinding, and special events. The largest of the projects suggested in the new products section is Adventure Africa. This project focuses on the decision of the Milwaukee County Zoo to ensure the long-term success of elephants. The project will thematically engage the majority of the southern portion of the zoo providing flexible, large, mixed species yards for African elephants. The project also includes a new elephant barn and improvements to the existing Pachyderm building and yards.

Another major project for the southern portion of the Zoo is the renovation of the polar bear, brown bear, and seal exhibits alongside a minor renovation of the Lake View Restaurant in Alaska's Cold Coast. This project will integrate a pinniped exhibit and show space with amphitheater into renovated existing exhibits while providing expanded and improved polar bear habitat. The restaurant will have unprecedented views of both sea lions (show and exhibit) and polar bears.

Finally, the entrance experience for guests will drastically change through this master plan. Not only will an additional entrance be available on the west side, but streamlined parking and admissions will allow guests a much smoother, more efficient entry experience to the Zoo. Exit retail will be improved and expanded to better engage the visitors and increase revenues for the Zoo's mission.

New Products

Brand Statement

Milwaukee County Zoo is an innovative, modern, community-based zoo in a naturally beautiful setting providing an educational, family-focused, year-round escape to the wild.

- **Innovation**...through animal care, unique exhibitry, conservation education story-telling and programming
- Modern...well-designed, efficient facilities utilizing today's accepted practices while looking toward the future*
- Community-Based...supporting local economy and partnering with other regional cultural resources
- Naturally Beautiful ...differentiation from other regional zoos*
- **Educational...**through experience, programming and 'bringing the back of house forward'
- Family-Focused...our primary market
- **Year-Round**...encouraging attendance growth in shoulder and off-season
- Escape To the Wild...natural setting and authentic, naturalistic exhibits, connecting guests to conservation*

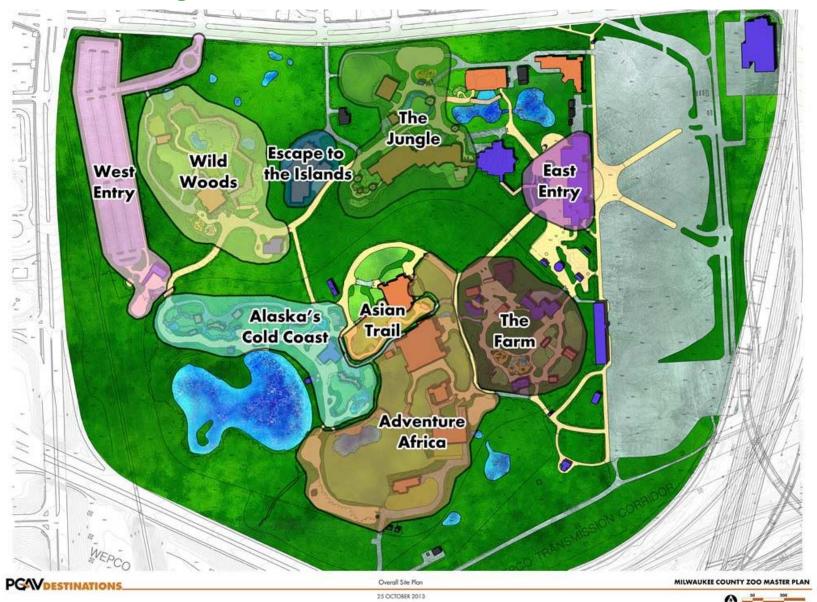
^{*} These characteristics in particular will drive aesthetics and architecture of the Zoo's visual brand.



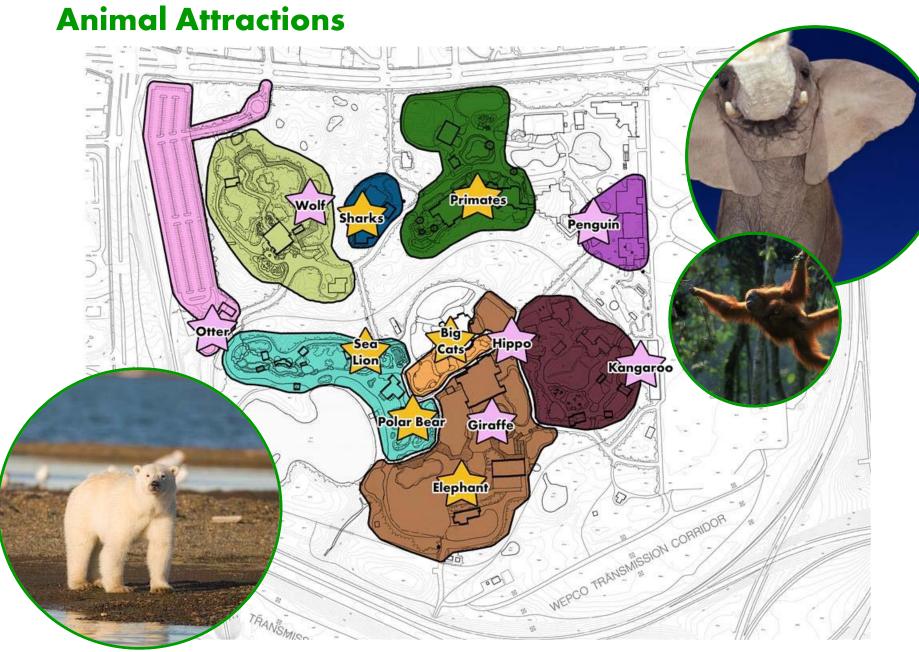
Overall Site Plan



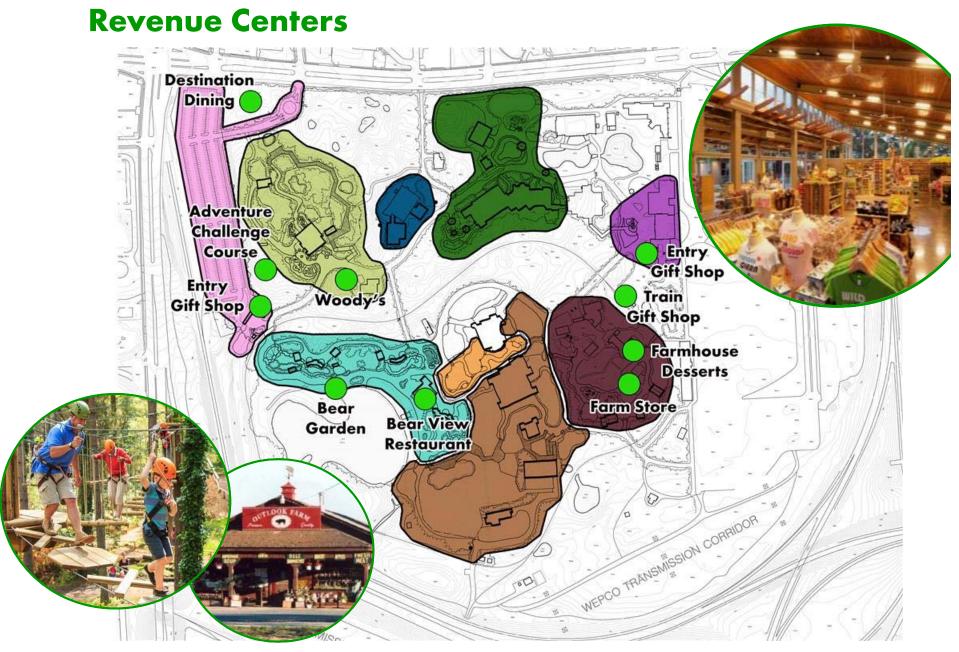
Overall Organization



New Products: Animal Attractions



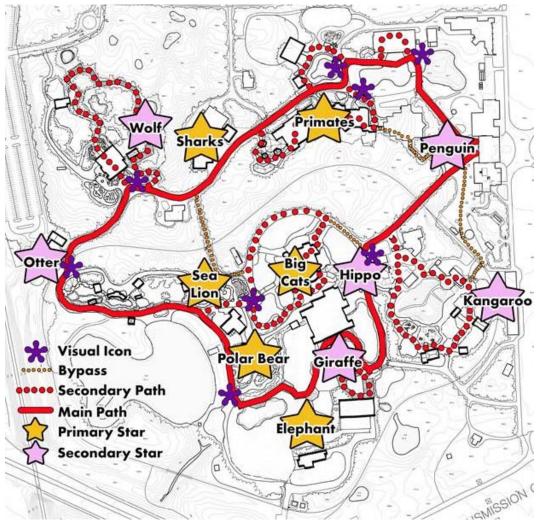
New Products: Revenue Centers



New Products: Non-Animal Attractions



Overall Circulation



Circulation, and perhaps more importantly, wayfinding will be improved throughout the Zoo with careful planning of the paths. The first goal will be to create a wide, clearly marked main path that moves guests throughout the entire zoo, providing easy access to each major attraction.

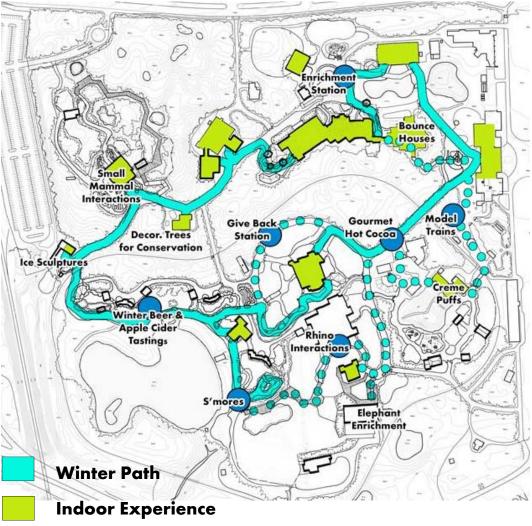
From the main path, secondary loops allow guests to explore exhibits more deeply without missing another attraction or requiring backtracking.

Bypasses are shortcuts, often between secondary and main paths, that allow frequent and repeat visitors to more quickly access specific parts of the Zoo. These bypasses shall be infrequent and strategically placed to allow more efficient circulation without causing confusion to those guests who are unfamiliar with the Zoo's layout. Bypasses will have minimal views or attractions along them.

Along with the main path, visitors' wayfinding will be improved with the strategic placement of strong visual icons marking the entry and exit to major attractions and / or thematic regions. Thematic regions themselves provide additional wayfinding, so each region shall have a recognizable visual identity.

Circulation improvements shall be accomplished on a project by project basis.

Winter Trail



In order to provide a comfortable winter guest experience, warming opportunities should be provided at intervals of around 5 minutes. At an average walking speed of 3 miles / hour, warming opportunities should be spaced no further than 1300 feet apart.

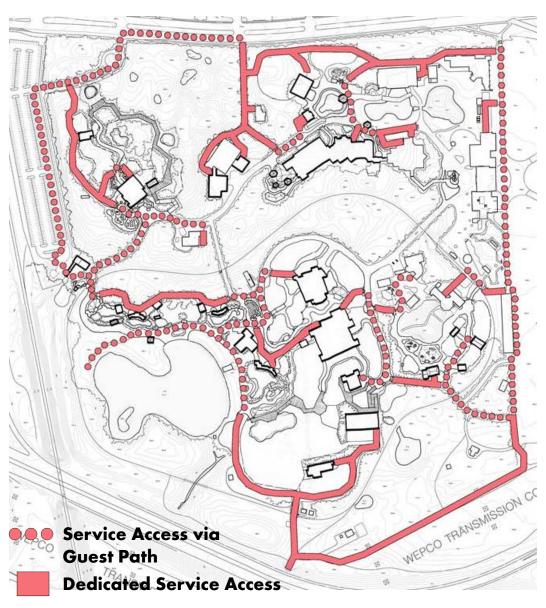
Warming opportunities include permanent exhibit buildings, revenue opportunities with permanent indoor seating, and temporary / seasonal rest areas with heaters, preferably covered. Each warming station shall be related to a unique experiential opportunity, either as an additional cost or as part of admission. Warming stations can serve a dual purpose as cooling stations in the summer by providing shade and misters on hot days.

Ultimately, this 'winter trail' will be marketable, providing a different experience from the summer. Thus, the winter experience will encourage off-season visitation.

Potential Warming Station

•••• Extended Winter Path

Overall Service Access



The ideal condition for service access would eliminate all visitor / service crossovers and shared paths with the creation of a service ring road around the Zoo. However, the Zoo's highly valued wooded site and varied terrain limit the ability to create such a road.

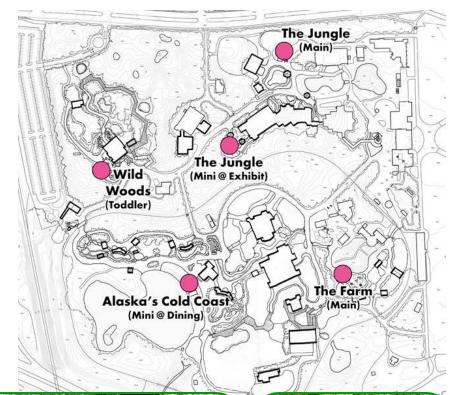
With the addition of strategically placed new service roads and changeover of specific guest paths to service only, the number of shared service and guest paths will be decreased from existing conditions. Additionally, as often as possible, when shared paths are unavoidable, service routes will be directed along the paths with the lowest guest density.

This master plan aims to improve service access on a project by project basis.

Play

The Zoo currently has only one dedicated, formal play area, located within the Farm region. Additional unique play areas will be added strategically throughout the zoo as elements within major new exhibit regions and attractions. Furthermore, all new exhibits shall feature several informal play elements that also serve as educational messaging. This master plan includes:

- Renovation and redesign of existing play at the Farm as part of the Splash Pad project
- Addition of jungle-themed all ages play area as part of the The Jungle exhibit area
- •Addition of climbing structure with viewing platforms in exhibit as part of The Jungle
- •Addition of rustic North American themed play for all ages as part of the Alaska's Cold Coast exhibit area
- Addition of garden themed toddler specialty play at Wild Woods Discovery Garden









New Products: 10 Year Master Plan

West Entry



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West Entry Concept

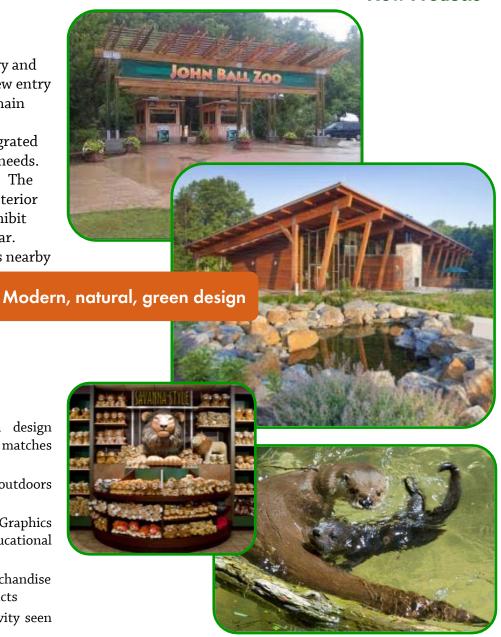
Due to the highway reconstruction, a new west entry and parking lot is required to meet zoo capacity. The new entry will provide an equitable experience to that at the main entry on the east. Based on the capacity of the new parking lot, a gift shop and snack stand will be integrated into one building in order to minimize operational needs. Toilets and separate turnstiles will also be included. The snack bar will include service windows from both interior and exterior. The new west entry will include an exhibit which shall be adjacent to the gift shop and snack bar. Additionally, a picnic area will be set into the woods nearby allowing use of the snack stand and toilets.

Estimate: \$7 million total project

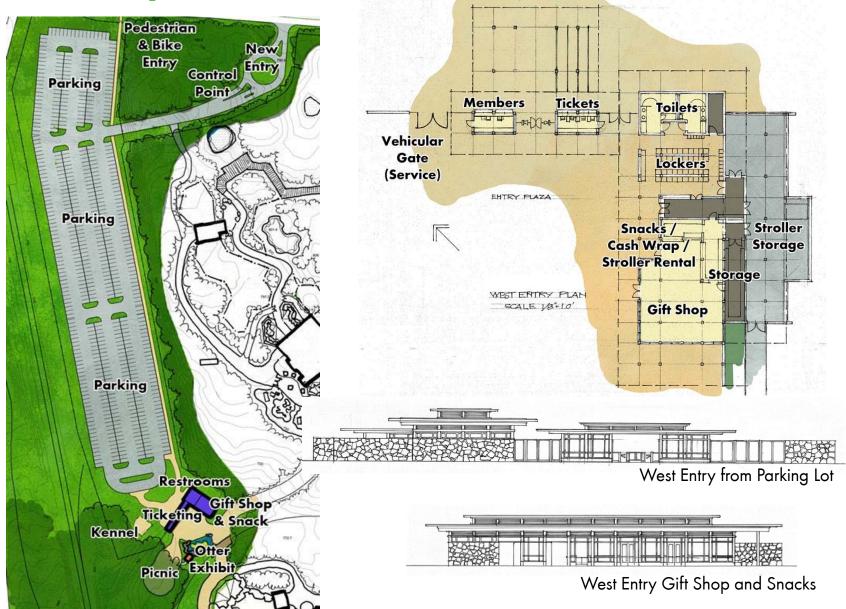
Experiential Concept

'Modern, eco-friendly nature center'

- Green and natural materials with modern design reflecting the visual identity of the MCZ brand; matches master planned updates to East entry
- Maximize connection between indoors and outdoors including symbolic connection to nature
- Merchandise displayed in thematic collections; Graphics and signage connect specific merchandise to educational messaging
- Purchases=conservation action with specific merchandise ... ie socially and environmentally conscious products
- Adjacent otter exhibit provides year round activity seen by both arriving and in-park guests



West Entry Site Plan



West Entry Gift Shop Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day) plus weekends during higher shoulder months or special event weekends
- Limited/smaller retail venue with some cross-over of food/snack sales; could be independent of destination dining opportunity but integrate with evening visitor/users

Operational Cost Projections							
Total Project Budget	\$1,020,000						
Construction Budget Projection	\$689,170						
(net of design & owner's costs)							
Annual Incremental Operating Expenses Net of \$\$\$							
Direct Incremental Operating Expenses:							
Total of 1,600 sf of retail at new West Entry							
Net of 1,000 sf for retail sales/operational 50% for peak days only							
Seasonal staff as increase in retail sales floor space							
Utilities: electric							
Expenses are net of per capita sales increases - 35% net							

Incremental Operating Revenue Projection					
Potential Revenue Opportunities (Annual)	\$150,000				
Net Revenues (net of salaries & COG) (Ann	<i>\$52,500</i>				
(based on \$300 sf revenue at 50% operational time)					
Per cap spending will continue to increase in future years					
New product/merchandise offerings					
Increased Stay Time/Per Capita Spending					
Potential Increase to \$350 sf revenue at 50% operational (16% increase)					
If based on \$350 sf - net annual revenues would be \$62,					

West Entry Bluemound Access



West Entry Entry from Parking Lot



West Entry Entry Plaza from Zoo Main Path



The Farm



© Jennifer Donovan



The Farm Concept

The Farm region of the Zoo currently is oversized, and with its location near the east entry, is the ideal spot for adding a splash pad. Because splash pads are highly popular with both current guests and non-visitors, the addition will lengthen stay time and likely increase attendance. Along with the splash pad, changing rooms and a sundries shop will be added. The shop will include a small deli. Additionally, the undersized Dairy Store will be expanded, and a walk-through Australian exhibit will be created.

Estimate: \$4.4 million total project

Experiential Concept

'Whimsical farm and garden'

- Colorful custom play elements inspired from farms and gardens
- Opportunity for animal feeding including special wallaby feeding
- Oversized elements like flowers, watering cans and hoses; Miniature barns and tractors with platforms and slides
- Incorporation of appropriate animal elements
- Non-ticketed; concessions and lockers adjacent
- Requires changing rooms and toilets adjacent



The Farm Site Plan



The Farm Splash Pad Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day): 100 operating days annually
- Non-ticketed with visitor amenities
- Green technology via use of guest activated touch sensors that conserve both water and electricity

Operational Cost Projections						
Total Project Budget	\$1,220,000					
Construction Budget Projection (net of design & owner's costs)	\$826,087					
Annual Incremental Operating Expenses \$3						
Direct Incremental Operating Expenses:						
Part-time Staff (3 per day) for supervision	n & cleaning					
Utilities: water & electric						
Liability Insurance						
Maintenance Supplies						

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven Plus

(Via Direct/Indirect Revenues)

Sponsorship of Splash Pad

Member Mornings (increased value)

Birthday Parties/Evening Rentals

Increased Stay Time/Per Capita Spending/Repeat Visits

The Farm Farmhouse Desserts

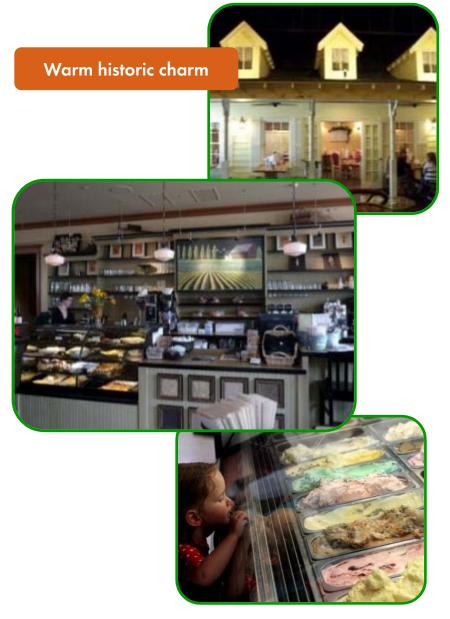
The current ice cream shop in the Farm area is undersized and outdated. Its ideal location provides an opportunity for enhanced revenues with larger capacity. The enhanced Farmhouse Desserts offering will be appropriate to the concept and will be specialized within the Zoo. Ice cream, eco-friendly specialty coffees, and homemade desserts from locally sourced farms shall be showcased.

Estimate: **\$850,000**

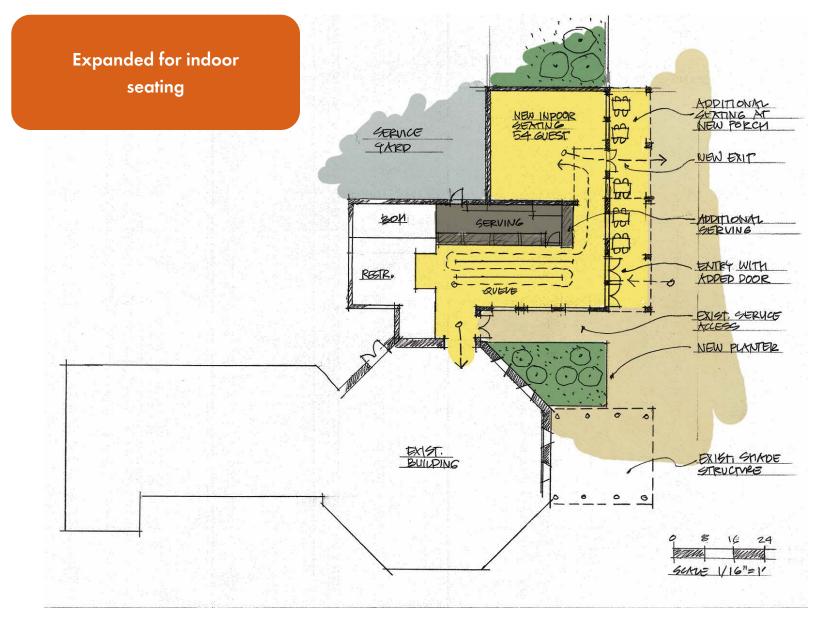
Experiential Concept

'Historic farm kitchen'

- Historic charm with wood furniture, pie-cabinets, jars of preserves, fruits and vegetables, antiques and folk art hanging on the walls
- Views of splash pad and animal yards adjacent
- Limited quick service window for guests on exterior (easy access for adjacent splash pad) along with interior counter service
- Indoor seating for 32; Outdoor seating for 100



The Farm Farmhouse Desserts Floor Plan



The Farm Farmhouse Desserts Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day) plus weekends during the shoulder months
- Per cap increase is very conservative as if programmed to showcase "ice cream, bakery goods and fun novelties (with cooking smells), increase could be 25% or more – could be in operations more than 6 months depending on weather and special events
- Should be a high priority given baseline investment as would further provide further draw to the Farm area. Would also benefit from a splash pad experience during peak summer months

Operational Cost Projections		
Total Project Budget	\$850,000	
Construction Budget Projection (net of design & owner's costs)	\$574,131	
Annual Incremental Operating Expenses		Net of \$\$
Direct Incremental Operating Expenses:		
Seasonal staff as increase in food sales & new product Utilities: electric Expenses are net of per capita sales increases - 30% net		

Incremental Operating Revenue Projection						
Potential Revenue Opportunities (Annual)	\$90,000					
Net Revenues (net of salaries & COG) (Annual)	\$27,000					
(based on 15% increase in monthly sales for 6 months						
Incremental above current ice cream shop per cap						
Per cap spending will continue to increase in future years						
Ice cream and fresh baked goods; seasonal operations						
Increased Stay Time/Per Capita Spending						

The Farm Farm Store and Deli

Although the splash pad itself will not have an admission fee, the attraction will generate revenue through associated merchandise and food sales. The splash pad and concessions will be themed to the farm, and will include sundries and souvenirs such as sunscreen, water toys, towels, swimwear, sunglasses, and water shoes. This shop will also serve the Farm area as a whole and thus will sell country and farm-themed products. Locker rental will also be available here. Deli, replacing the current Panini stand, will serve quick service items and appropriate specialty and homemade items like salads and breads.

Estimate: **\$900,000**

Experiential Concept

'Country store'

- Warm historic charm with goods spilling outside under covered porch
- Exposed heavy wood beams and barn paneling with farm implements hanging from ceiling and walls
- Merchandise displayed in barrels, wood shelves and bins, and glass jars and cases
- Counter service and deli case (no indoor seating); Outdoor and covered seating for 100 with adjacency to splash pad / play



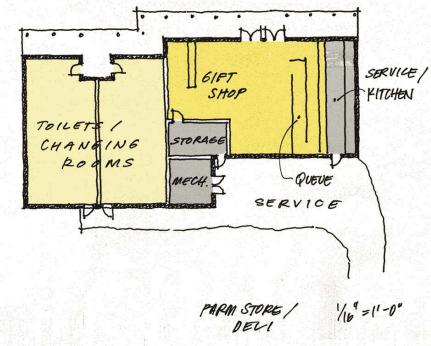




The Farm Farm Store & Deli Floor Plan

Indoor space with both gift shop and deli





The Farm Farm Store and Deli Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day) plus weekends during shoulder months and special event weekends
- Would integrate with the splash pad experience and support fun nearby picnic area of the splash pad
- Incremental per capita as replacing the current Panini stand

Operational Cost Projections	
Total Project Budget	\$910,000
Construction Budget Projection	\$619,320
(net of design & owner's costs)	
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Seasonal staff as increase in food sales & new product	
Utilities: electric	
Expenses are net of per capita sales increases - 30% net	

Incremental Operating Revenue Projection Potential Revenue Opportunities (Annual) \$125,000 Net Revenues (net of salaries & COG) (Annual) \$37,500 (based on 750 sf of new sales space; \$250 per sf sales; operates 8 months Incremental above current Panini stand; plus retail from Farm store Per cap spending will continue to increase in future years Quick serve items with country/farm products Increased Stay Time/Per Capita Spending

The Farm Splash Pad with Farm Store



East Entry



© Richard Brodzeller



East Entry Concept

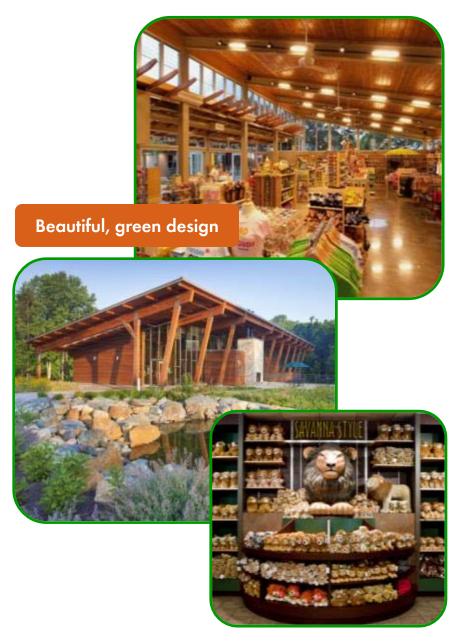
The current entry / exit gift shop is undersized and often spills out into the interior gathering space as well as onto the outdoor plaza with temporary displays. The shop shall be enlarged and improved to better engage the guest flow. In order to accomplish this, offices must be relocated into a new addition. The ticketing process that now occurs from the vehicle upon entry to the parking lot, will be streamlined to improve efficiency and decrease wait times at the entry. This will require new ticketing kiosks, turnstiles and a new perimeter fence. Additionally, to better meet the husbandry needs of the Humboldt penguins in the entry plaza, the exhibit and holding will be enlarged and improved.

Estimate: \$6.5 million total project

Experiential Concept

'Modern, eco-friendly nature center'

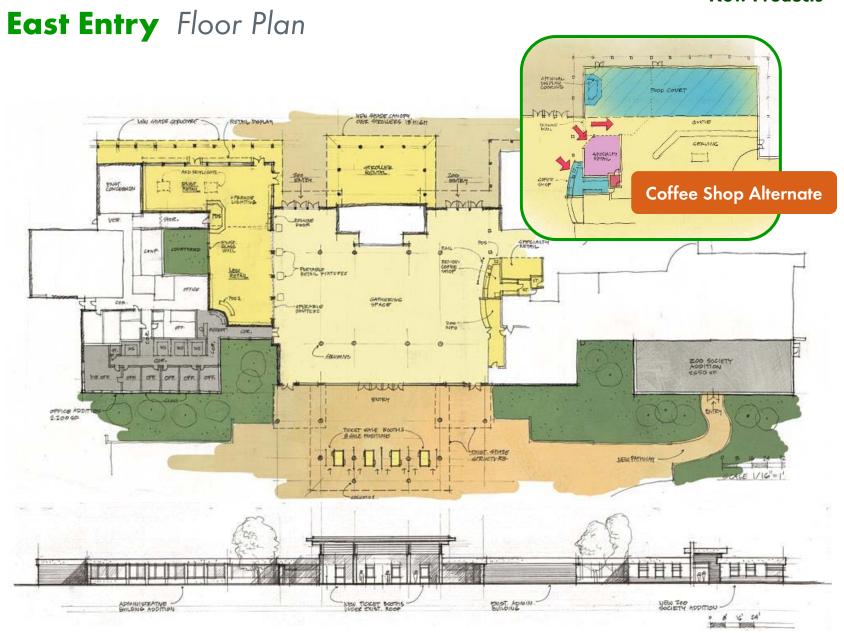
- Green and natural materials with modern design
- Maximize connection between indoors and outdoors including symbolic connection to nature
- Manage visitor flow for maximum efficiency and revenue
- Merchandise displayed in thematic collections; Graphics and signage connect specific merchandise to educational messaging



East Entry Site Plan

Renovated facades, expanded penguin reinvigorate the entry plaza.





East Entry Gift Shop Business Analysis

Operating Assumptions:

- Year-round operations with easy visitor flow during the arrival/exit sequence
- Utilization of mobile carts to capsule overflow visitors in the area will be important
- Per capita growth could be conservative as significant upside if programmed correctly to allow easy access during arrival/exit
- Creating a "gathering spot" during the arrival/exit will be another strategy

Operational Cost Projections	
Total Project Budget	\$3,190,000
Construction Budget Projection (net of design & owner's costs)	\$2,162,905
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Seasonal staff as increase in retail sales floor space Utilities: electric Expenses are net of per capita sales increases - 35% net	

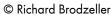
Incremental Operating Revenue Projection						
Potential Revenue Opportunities (Annual)	\$324,000					
Net Revenues (net of salaries & COG) (Annual)	<i>\$113,400</i>					
(based on \$.24 per cap increase on 1.35MM)						
Increase in total retail per capita: from \$1.37 gross net to \$1.61 (17% increase)						
Per cap spending will continue to increase in future years						
East entry/exit gift shop expanded to 3,600 sq/ft						
New product/merchandise offerings with indoor "connector	.11					
Increased Stay Time/Per Capita Spending						
Potential Increase to \$1.65 gross per cap (20% increase)						
If based on \$1.65 per cap - net annual revenues would be	\$133,000					

East Entry Plaza



Adventure Africa







Adventure Africa Concept

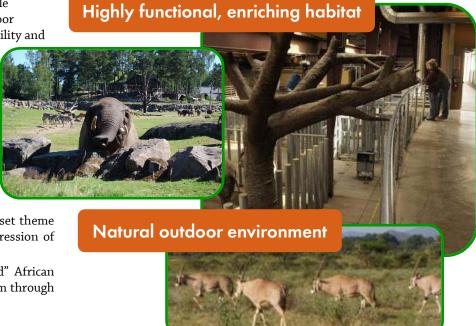
Elephant reserve in Africa. Highly functional design for flexible management of elephants, with naturalistic, immersive outdoor exhibits. Multiple outdoor habitats for all species allow flexibility and exercise.

Estimate: \$23.2 million total project

Experiential Concept

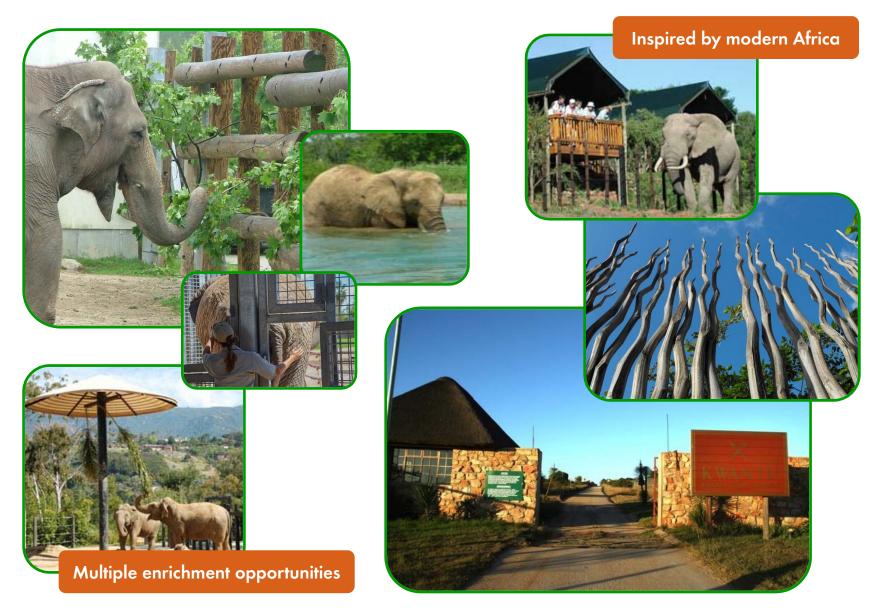
'Modern day elephant reserve in Africa'

- Modern look and feel with African influence
- Strategic use of combination of moats and fences to set theme of sanctuary by providing both realistic feel and impression of vast spaces
- Just outside the doors of the 'Reserve' is the "wild" African savanna—giraffes, rhinos, hippos, antelope, zebra roam through savannas
- Message: Most 'wild areas' are highly managed



Animal	Pop.	Out. Exhibit: Required	Out. Exhibit: Recommend.	Indoor Exhibit: Required	Indoor Exhibit: Recommend.	Holding: Required	Holding: Recommend.	Pool Size (gal)	Barriers
African Elephants	5	5400 sf / animal	150,000	N/A	7,850	600 sf / bull; 24' vertical clear	500 sf stall; (1) 850	Outdoor pool large enough for submersion @ 6' depth; Indoor shallow pool is a plus;	Vertical Wall / Fence: 8'
Hippo	3	1200 sf / 1; 600 sf per additional	N/A—Not incl in this project	N/A	3,000	12' x 14' stall w/ 10' x 12' x 4' pool	N/Aexisting	Min. 10' x 12' x 5'	Vertical Wall / Fence: 6'; Moat: 7' wide;
Rhino	5	1500 sf / animal	26,000	N/A	8,000	200 sf / animal	(3) 20' x 20' stalls; (2) 20' x 40' stalls	N/A; Mud wallow	Vertical Wall / Fence: 5'
Zebra	5	1800 sf / 3; 650 sf per additional	Shared w/ Rhino	N/A	5,000	N/A	(5) 10' x 10' stalls	N/A	Vertical Wall / Fence: 8'
Giraffe	6	900 sf / animal	N/A—Existing	N/A	N/Aexisting	225 sf / animal w/ 20' ceiling	N/Aexisting	N/A	Vertical Wall / Fence: 5'
Antelope	8	300 sf / animal	15,000	N/A	2,400	100 sf / animal	(4) 10' x 15' stalls	N/A	Vertical Wall / Fence: 8'
African Wild Dog	5	5000 sf / pair + 1000 sf / add'l	12,000	N/A	N/A	200 sf / animal	(5) 10° x 10° stalls; (2) 20° x 20° outdoor yards	Shallow pool of approx. 500 sf	Vert Wall / Fence: 8' + 3' kickback; 12" dig barrier

Adventure Africa Concept



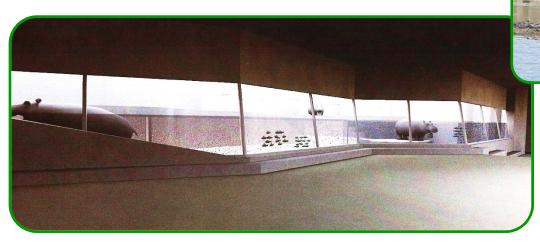
New Products

Adventure Africa Hippo Exhibit

The first project to be completed within the overall Adventure Africa is the Hippo exhibit and holding renovations. Design is complete on this large naturalistic exhibit with both above and below water viewing. The project includes a large viewing structure, hippo plaza, and view into the new LSS room.



Natural outdoor environment

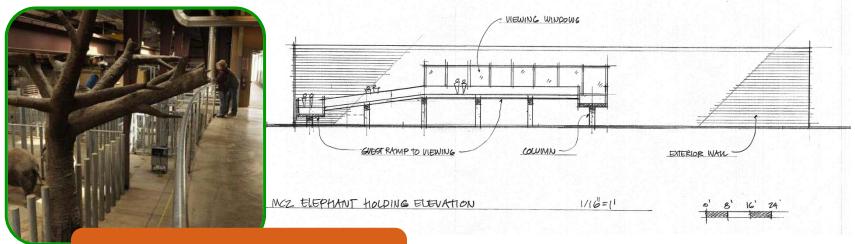




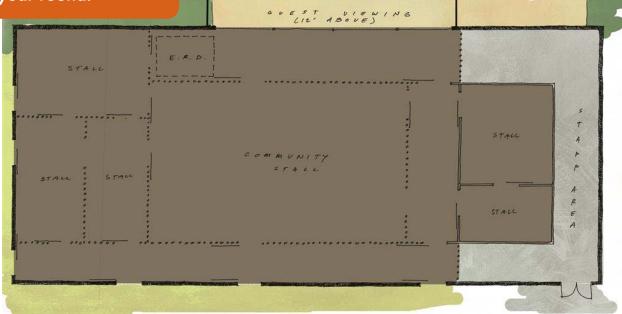
Adventure Africa Site Plan



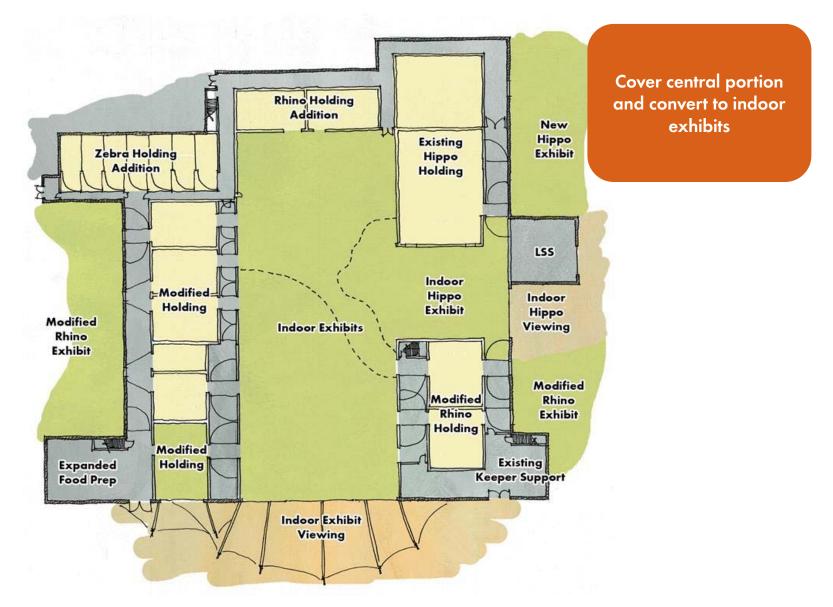
Adventure Africa Elephant Barn Floor Plan



Entire barn on exhibit for public viewing year round.



Adventure Africa Pachyderm Barn Floor Plan



Adventure Africa Business Analysis

Operating Assumptions:

- Expanded animal exhibit & attraction that provides new attendance plateau for the Zoo
- Staffing increases are incremental above existing staffing levels
- Major new attraction for the Zoo with revenue and attendance sustainability

Operational Cost Projections		
Total Project Budget	\$23,200,000	
Construction Budget Projection	\$15,717,220	
(net of design & owner's costs)		

Annual Incremental Operating Expenses

\$1,257,378

Direct Incremental Operating Expenses:

Staffing: additional animal management with half-time facility maintenance

Additional Interpretive staff (seasonal)

Utilities: water & electric

Animal Food

Insurance: General Liability and Property

Maintenance Supplies

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven Plus & Sustainable

(Via Direct/Indirect Revenues)

Increased attendance (5% lift in the Zoo's baseline; 8% initial year)

Rationale for admission and membership fee increases

New attendance plateau with stabilized new baseline

Special/Behind the Scene Tours with Fees

Exhibit Sponsorship

Increased Stay Time/Per Capita Spending/Repeat Visits

Adventure Africa Savanna View



Adventure Africa Pachyderm Building



The Train



Train Experience & Gift Shop Concept

The current train ride is popular, but lacks connection to zoo. The coordination of exhibits with the ride to allow views of animals provides opportunity for conservation messaging along with increased entertainment value. A gift shop dedicated to all things trains, including model trains and accessories, memorabilia, apparel, and toys, capitalizes on a niche interest and adds a unique retail experience.

Estimate: \$170,000 total project

Experiential Concept

'Historic train station'

- Updated exterior for main train station to mimic historic train station
- Historically themed gift shop located inside main station with memorabilia hung on interior walls and fixtures inspired from turn of the century style
- Potential for addition of train stations for use as alternative transportation
- Strategic coordination of new exhibits to train layout
- Opportunity for special event days related to trains
- Total 300 sf



Train Experience & Gift Shop Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day) with potentially 8 months of operations
- Potentially could be managed and positioned as part of overall train
- Net margin will be lower than typical retail sales due to "uniqueness" of product mix

Operational Cost Projections	
Total Project Budget	\$170,000
Construction Budget Projection	\$113,802
(net of design & owner's costs)	
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Seasonal staff managing a 300 sf retail venue; nich	e products
Seasonal operations: 8 months	
Utilities: electric	
Expenses are net of per capita sales increases - 25%	6 net due to "unique" products

Incremental Operating Revenue Projection							
Potential Revenue Opportunities (8 months)	\$60,000						
Net Revenues (net of salaries & COG) (Annual)	\$15,000						
(based on 300 sf of new sales space; \$200 per sf sales; operates 8 months							
Niche train related products and merchandise							
Per cap spending will continue to increase in future years							

Alaska's **Cold Coast**



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Alaska's Cold Coast Concept

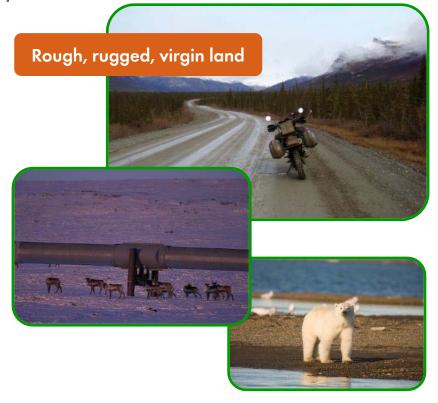
Highlights the unique land of the Alaskan North Slope where grizzly and polar bear habitats overlap. Renovations of the existing bear and hoofstock exhibits as well as the Lakeview restaurant. Reuse and expansion of the existing polar bear exhibit, including addition of pinnipeds exhibit and demo space. Include other relevant species like Caribou and Sea Otter.

Estimate: \$31.5 million total project

Experiential Concept

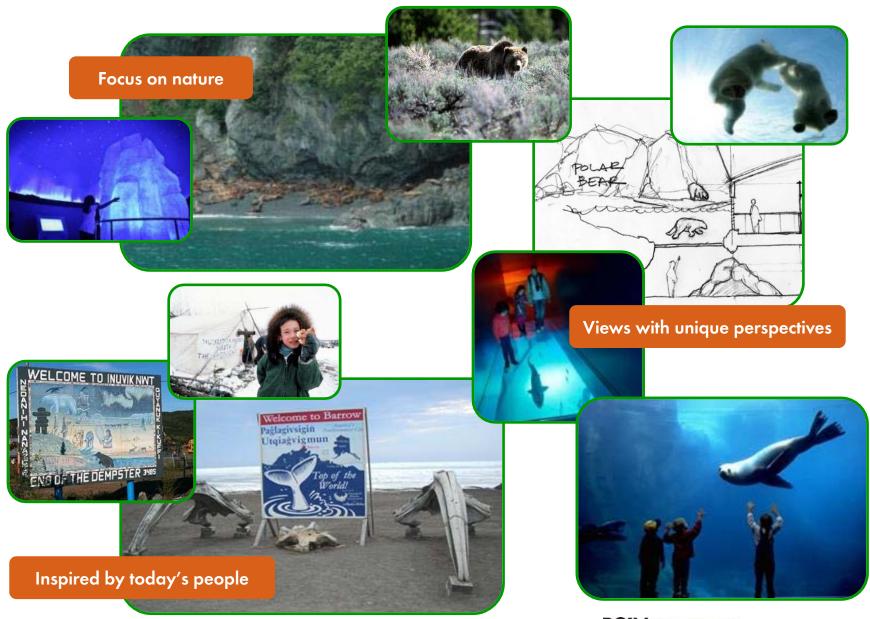
'Trekking through the wilds of the Beaufort Sea Arctic tundra'

- Primarily exterior guest experience
- Unique points of view: seals under foot, polar bears above
- Views from dining into adjacent exhibits
- Limited architecture; when used, inspired by real towns, like Inuvik, Canada or inspired by native American influences
- Mimics natural habitat with sparse evergreen forest and tundra grasses; changes seasonally
- North Slope is central to today's debates about oil drilling—a natural messaging opportunity



Animal	Pop.	Out. Exhibit: Required	Out. Exhibit: Rec.	Indoor Exhibit: Recommend.	Holding: Required	Holding: Recommend.	Pool Size (gal)	Barriers
Polar Bear	2-4	5400 sf / 2 bears; 1650 sf per additional	21,000	N/A		pool	754 sf / 1 = 1500 sf; Must include shallows; Deep end must be at least 9.5'; Water temp below 65 deg F;	Vertical Wall: 16.4'; 13.2' Vertical for moats; Moats require method to break bear's fall
Pinniped	6	250 sf / animal (total area); 63 sf per additional	3,000	N/A	N/A	8' x 8' isolation stall	Half total exhibit size in area; 4' min. depth & 12' MHD; Water temp between 40 - 70 deg F; Saltwater	Vertical Wall: 6'; Moats can be used, but animals will utilize
Caribou	8	1800 sf / animal	N/A; Existing	N/A	N/A	N/A; Existing	N/A	N/A
Brown bear	6	500 sf / pair (total area); 80 sf / additional	N/A; Existing	N/A	N/A	N/A; Existing	100 sf / pair; 40 sf per additional; Existing	Vertical Wall: 12'; Existing

Alaska's Cold Coast Concept



Alaska's Cold Coast Site Plan



Alaska's Cold Coast Business Analysis

Operating Assumptions:

 Major attendance and operating revenue generating with sustainability due to animals and visitor amenities with food and retail venues – integration into the theme and views will be critical for stay-time

Operational Cost Projections		
Total Project Budget	\$30,690,000	
Construction Budget Projection	\$20,791,767	
(net of design & owner's costs)		
Annual Incremental Operating Expenses	\$1,871,	,259
Direct Incremental Operating Expenses:		
Staffing: additional animal management with	n half-time facility maintenance	
Half-time landscape & exhibit maintenance		
Additional Interpretive staff (seasonal)		
Utilities: water & electric		
Animal Food		
Insurance: General Liability and Property		
Maintenance Supplies & alass cleanina		

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven Plus & Sustainable

(Via Direct/Indirect Revenues)

Increased attendance (5% lift in the Zoo's baseline; 8% initial year)

Rationale for admission and membership fee increases depending on opening

New attendance plateau with stabilized new baseline

Special/Behind the Scene Tours with Fees

Exhibit Sponsorship

Increases in food per cap with adjacent dining viewing into exhibits

Increased Stay Time/Per Capita Spending/Repeat Visits

New Products

Alaska's Cold Coast Bear Garden

The long stretch of main path from Wild Woods to Lakeview Restaurant is under-utilized from a guest perspective. The new beer garden (Bear Garden) provides a place to rest and enjoy the lake setting while being immersed in Alaska's Cold Coast.

Estimate: **\$500,000**

Experiential Concept

'Alaska's beer garden'

• Use of heavy timbers, stone and metal to reflect an authentic Alaskan town setting

- Deck overlooking the lake
- Enhanced natural setting with evergreens and boulders incorporated to soften
- Small elevated outdoor stage
- Fire pits in the winter months
- Outdoor counter service and table service available
- Outdoor seating for 100
- New toilet facility nearby



Alaska's Cold Coast Bear Garden Business Analysis

Operating Assumptions:

- Seasonal operations (Memorial Day –Labor Day) plus weekends during shoulder months. Could be a destination location during Fall special events/promotions
- Branding and sponsorship opportunities especially with integration with Alaska's Cold Coast exhibit
- Assess opportunities to increase outdoor seating and how best to integrate with Cold Coast exhibit and theming

Operational Cost Projections		
Total Project Budget	\$490,000	
Construction Budget Projection (net of design & owner's costs)	\$329,845	
Annual Incremental Operating Expenses	Λ	et of \$\$
Direct Incremental Operating Expenses:		
Seasonal staff as increase in food sales & new product Utilities: electric Expenses are net of per capita sales increases - 30% net		

Potential Revenue Opportunities (Annual) \$140,000 Net Revenues (net of salaries & COG) (Annual) \$56,000 (based on 750 sf of new sales space; \$350 per sf sales; operates 6 months New beer garden venue with outdoor seating with overlooks Per cap spending will continue to increase in future years

Beer and snack venue; higher net as per capita is higher

Increased Stay Time/Per Capita Spending

Incremental Operating Revenue Projection

Alaska's Cold Coast Bear View Restaurant

Building from the successful existing Lakeview restaurant, the newly branded and renovated Bear View Restaurant will featured updated outdoor seating with views of the adjacent new polar bear exhibit and renovated brown bear exhibit. Façade improvements will immerse visitors in the Alaska's Cold Coast theme. Viewing and theming will increase visitor stay and revenues.

Estimate: **\$260,000**

Renovate & provide animal viewing

Experiential Concept

'Modern Alaskan lodge'

- Outdoor seating directly adjacent to glass polar bear viewing framed with heavy timbers and stone
- Elevated outdoor seating across main path from brown bear exhibit to allow views into habitat
- Use of natural materials, metals and evergreens to enhance Cold Coast theme
- Other interior renovations may be necessary



Alaska's Cold Coast Bear View Restaurant Business Analysis

Operating Assumptions:

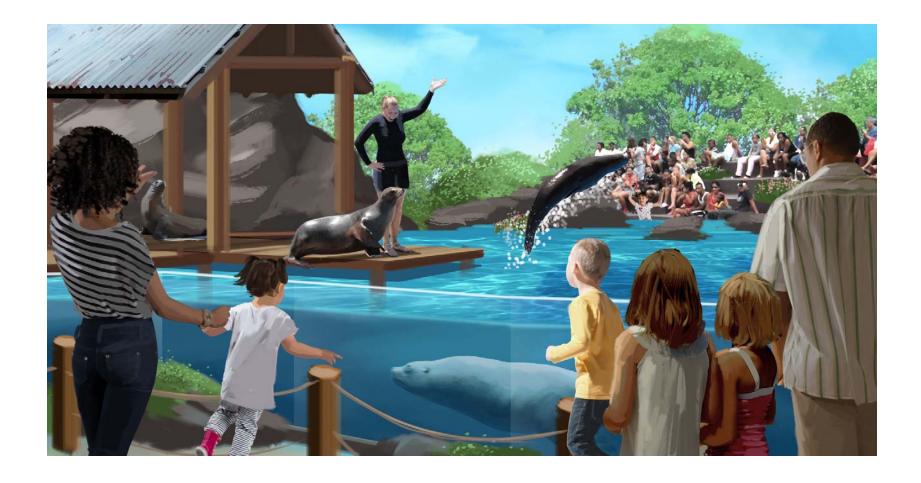
- Seasonal operations (Memorial Day –Labor Day) plus weekends during the peak shoulder months
- Renovation/expansion of existing location

Operational Cost Projections	
Total Project Budget	\$260,000
Construction Budget Projection (net of design & owner's costs)	\$177,019
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Seasonal staff as increase in food sales & new product Utilities: electric Expenses are net of per capita sales increases - 30% net	

Incremental Operating Revenue Projection						
Potential Revenue Opportunities (Annual)	\$67,500					
Net Revenues (net of salaries & COG) (Annual)	<i>\$20,250</i>					
(based on \$.10 per cap increase with 50% operational due to seasonality						
Incremental above current Lakeview restaurant						
Per cap spending will increase with theming and viewing	into animals exhibits					
Quick serve items						
Increased Stay Time/Per Capita Spending						

New Products

Alaska's Cold Coast Sea Lion Habitat and Amphitheater



Alaska's Cold Coast Bear Garden



New Products

Alaska's Cold Coast Polar Bear & Sea Otter Underwater



New Products: Beyond 2023

Escape to the Islands



Escape to the Islands Concept

Indoor reptile and aquarium experience renovating and expanding existing facilities. Focus on providing unique viewing experiences with even the smallest exhibits. Multiple settings including the Caribbean which provides bridge to real world projects led by MCZ, and serves as fun winter escape.

Estimate: \$11.5 million total project

Experiential Concept

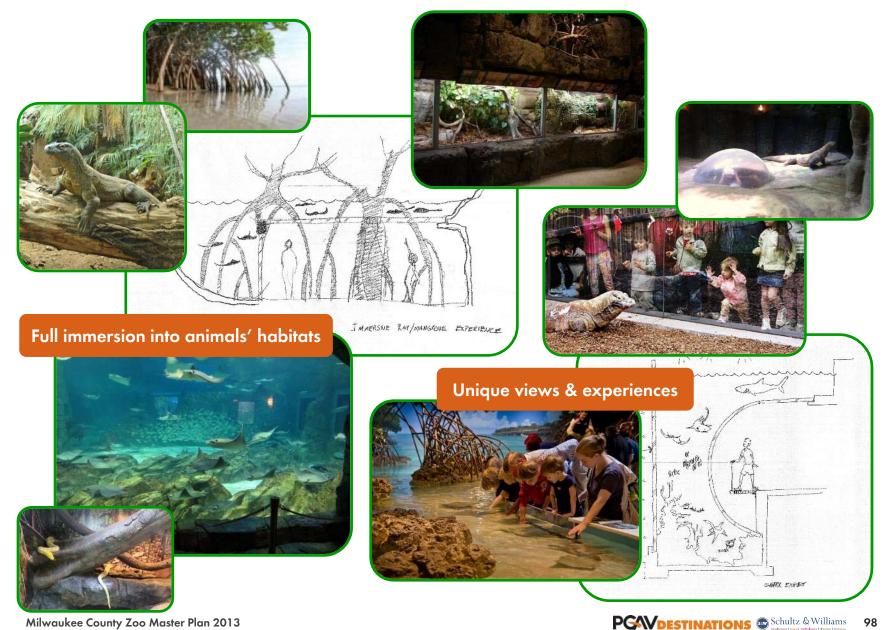
'Exotic and tropical respite in Milwaukee'

- Multiple habitat types: mangrove, beach / dunes, reef, desert
- Thematic zones built around zoogeographic animal groupings: Caribbean, Asian tropics, Australia, etc.
- Be surrounded by the animals (immersion as much as possible)
- Multiple touch experiences...docent stations
- Strong tie to conservation programs. Docents provide opportunity to connect directly with guests about conservation issues.
- \bullet Messaging about clean water and island effect on evolution
- Opportunity for fun winter 'fest' / special event weekend



Animal	Pop.	Out. Exhibit: Req.	Out. Exhibit: Rec.	Indoor Exhibit: Req.	Indoor Exhibit: Rec.	Holding: Required	Holding: Recommend.	Pool Size
Shark Tank		N/A	N/A	Dim. based on ave. max. length of largest species to be held; Pool Length = $12 x$ ave. length, Pool Width = $5 x$ ave.length, Pool Depth = $2.5 x$ ave. length	OR		N/A	Exhibit to avoid rectangular shape with rounded corners; Saltwater
Ray Touch		N/A	N/A		45,000 gal / 1100 sf OR 25,000 gal / 2500 sf	N/A	(1) 10' diam holding pool w/ 5' depth (as part of exhibit)	Exhibit to avoid rectangular shape with rounded corners; Saltwater
Komodo Dragon	3	N/A	1500 sf	N/A	1200 sf	N/A	(2) 12' x 12' stalls	Vertical Fence / Wall: 6'; Smooth wall to 4' to avoid abrasion. Dig barrier 18"
Giant Japanese Salamander	1	N/A	N/A	N/A	15' x 5' x 3' / 1700 gal	N/A	N/A	Chilled freshwater

Escape to the Islands Concept

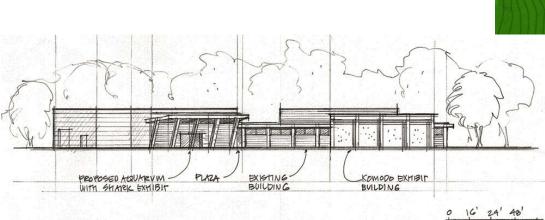


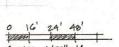
Escape to the Islands Site Plan

Includes a **sharks** exhibit of **85,000 gals**. This tank will be 1000 sf in area and 11' deep. This concept also includes a 45,000 gal ray touch experience. These exhibits will require an approximately 9000 sf expansion to the current building.

Also includes renovations to the existing building, including adding a new Komodo interior exhibit located along the entry path from the zoo's main guest path.

> Additions built as stand alone buildings connected by corridors





Service

Renovated ARC

Caribbean **Exhibit**

Indoor

Komodo

Exhibit

Islands Plaza

Escape to the Islands Floor Plan



Escape to the Islands Business Analysis

Operating Assumptions:

- Important mission/conservation linkage to the visitor experience
- Fun experiences with revenue potential for up-charging for "special programs or touches"

Operational Cost Projections		
Total Project Budget	\$11,550,000	
Construction Budget Projection (net of design & owner's costs)	\$7,828,505	
Annual Incremental Operating Expenses		\$391,425
Direct Incremental Operatina Expenses:		

Staffing: additional animal management with half-time facility maintenance

Additional Interpretive staff (seasonal)

Seasonal staff for touch opportunities

Utilities: water & electric

Minor increases in Animal Food

Insurance: General Liability and Property

Maintenance Supplies

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven & Sustainable

(Via Direct/Indirect Revenues)

Supports baseline attendance as unique/engaging experiences

Fees from "touch" experiences and conservation messaging

Special/Behind the Scene Tours with Fees

Special event promotions to drive off-season visits

Sleepover venue for groups

Could be part of member exclusive benefits/member mornings

Exhibit Sponsorship

Increased Stay Time/Per Capita Spending/Repeat Visits

The Jungle



© Richard Brodzeller



New Products

The Jungle Concept

Renovation and expansion of existing primates' building, including orangutans, with new homes for small mammals.. Expand and add outdoor exhibits to allow canopy walks. Apply theme to renovated monkey island, show venue and façade of special exhibits building. Integration of learning through play and discovery with climbing structures and digital media.

Estimate: \$15.5 million total project

Experiential Concept

'Swiss Family Robinson deep in the rainforests of the world'

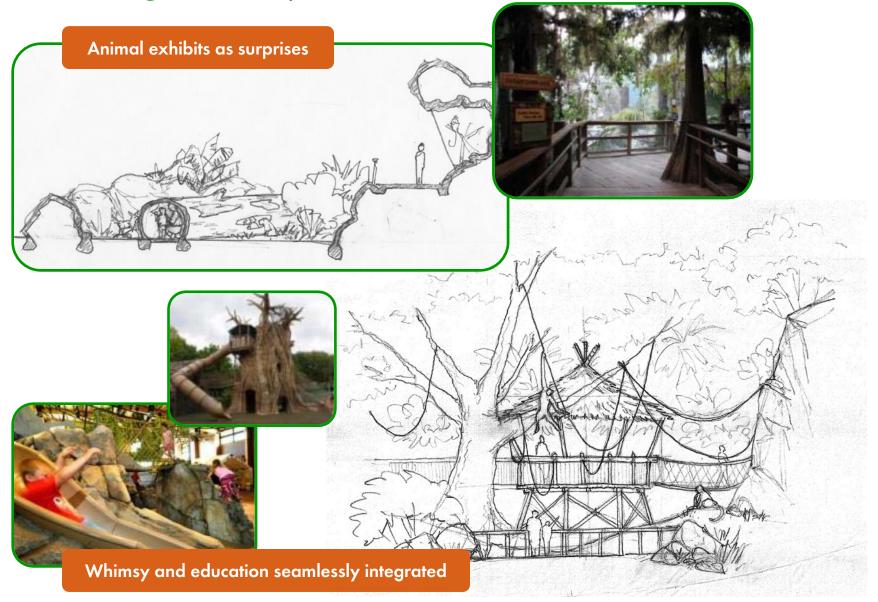
- Multiple jungles: Asian and African as anchors
- Pair physical play with animal connection
- Utilize multiple levels of canopy, indoors and out
- Scavenger hunt style media integration (Apptraction) refers to other areas of the zoo to fill out the forest's story
- Generic tropical treehouse and swinging bridge design with natural materials and rope (vine) lashing



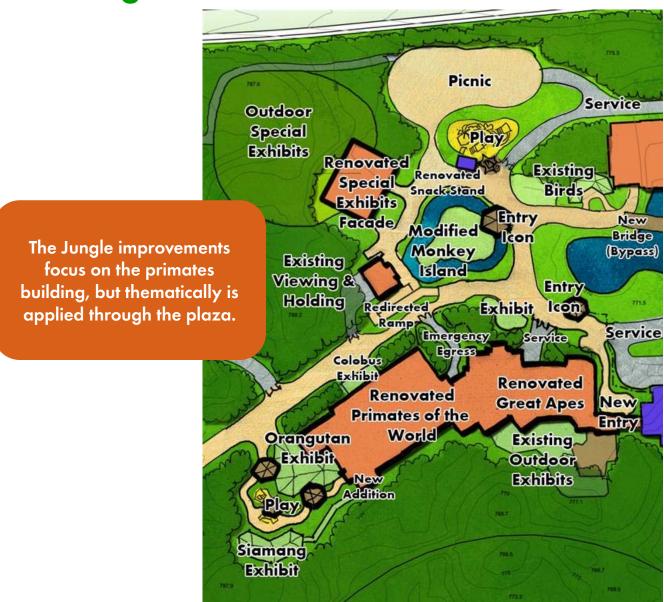


Animal	Pop.	Out. Exhibit: Required	Out. Exhibit: Rec.	Indoor Exhibit: Required	Indoor Exhibit: Rec.	Holding: Required	Holding: Recommend.	Barriers
Orangutan	5	200 sf / animal	5,000	200 sf / animal	2,000	8' x 12' per night room / orangutan; 12' x 20' x 20' day room;		Moat or Vertical Wall: 14.5'; Mesh enclosure
Guenon / Colobus	5	5x head-tail length ea dim	3,000	N/A	1,500	2x head-tail ea dim	(2) 12' x 12' stalls	Full enclosure
Lemur	6	N/A	N/A	25 sf / 2	600	2.5' sf per animal	(2) 5' x 5' stalls	Full enclosure
Springhaas	2	N/A	N/A	16 sf / 2	128	N/A		Full enclosure w/ dig barrier
Tamarin	18	N/A	N/A	32 sf / 6	576	N/A	N/A	Full enclosure or free- ranging indoors
Two-Toed Sloth	4	N/A	N/A	12 sf / animal @ 12' height (Height >horiz dim)	192	N/A	N/A	Full enclosure or free- ranging indoors

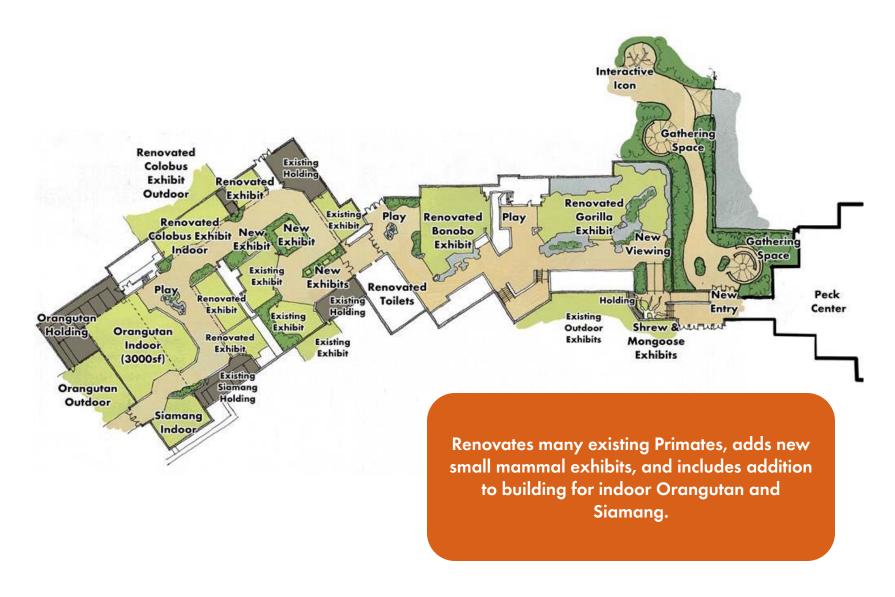
The Jungle Concept



The Jungle Site Plan



The Jungle Primates Floor Plan



The Jungle Business Analysis

Operating Assumptions:

- Year-round facility with indoor play/fun component
- Rental/party venue with sponsorship opportunities
- Interpretive experience will add "stay-time" along with indoor play

Operational Cost Projections		
Total Project Budget	\$14,850,000	
Construction Budget Projection	\$10,059,988	
(net of design & owner's costs)		

Annual Incremental Operating Expenses

\$754,499

Direct Incremental Operating Expenses:

Staffing: additional animal management with half-time exhibit maintenance

Additional interpretive staff for treehouse & play

Utilities: water & electric
Minor increases in Animal Food

Insurance: General Liability and Property

Maintenance Supplies

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven in Years 1 & 2

(Via Direct/Indirect Revenues)

Increased attendance (3% initial year and second year)

Special/Behind the Scene Tours with Fees

Exhibit Sponsorship

Increase in child/birthday events

Fun indoor play area

Could be member benefit as "member mornings" for exclusive benefit

New sources of revenues via Apptraction venues

Increased Stay Time/Repeat Visits

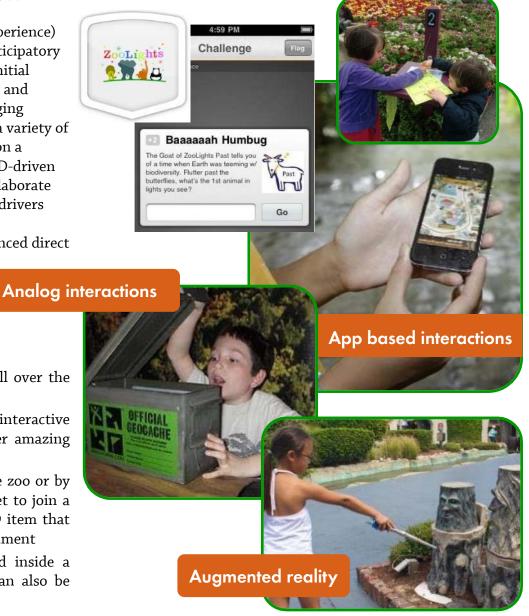
New Products

The Jungle App-traction

The App-traction (ie interactive digital media experience) integrates educational messaging into a fun, participatory experience that extends beyond the zoo gates. Initial implementation is zoo-wide, allowing for growth and development as funding, technology, and messaging changes. App-tractions can be implemented on a variety of technology levels from a simple scavenger hunt on a smartphone app with analog experiences, to RFID-driven interactions with the environment--or even an elaborate hybrid. App-traction can integrate with revenue drivers such as RFID-embedded merchandise or digital enhancements. Provides opportunities for enhanced direct marketing and social media sharing.

Estimate: **\$630,000**

- Non-linear journey of discovery
- Players go to special themed locations all over the Z00
- Players engage in fun, analog or digital interactive challenges for 30-60 seconds and discover amazing secrets about wildlife and nature
- If they gather enough secrets (within the zoo or by completing tasks outside the zoo), they get to join a club which allows them access to an RFID item that allows simple interactions with the environment
- Reward item may be free or purchased inside a 'secret shop'; Upgrades and accessories can also be purchased



The Jungle App-traction

Operating Assumptions:

- Needs further discussion and exploration
- Opportunities appear to be unlimited especially if a partner is identified
- Could leverage and support the Zoo's loyalty program for visitors and members another reason to visit or buy

Operational Cost Projections	
Total Project Budget	\$630,000
Construction Budget Projection (net of design & owner's costs)	\$424,845
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Zoo could incur investment but partnering with ar Commission or revenue share Could be "valued-added" with no revenue as posi	,
Spansorships could be secured	are transfer program.

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Unknown at this point

If value-added; need sponsorships

If loyalty program, should see increases in per capita spending for products Could be positioned as a member benefit - increasing membership sales Positioned to visitor survey data to promote repeat/next visit Opportunities appear unlimited; further details need to be explored

The Jungle Optional: Jungle Theater

The existing sea lion show is outdated and failing and will soon be abandoned. Adding a new, innovative high-energy show in its place will extend visitor stay time with minimal investment. The show, primarily utilizing actors, can easily be changed and adjusted as needed, and can incorporate a variety of animals as appropriate.

Estimate: **\$1,200,000**

High-energy, colorful and fun

Experiential Concept

'Non-aerial, rock n roll Cirque Du Soleil'

- Colorful costumes, minimalistic set design, upbeat music
- \bullet Tells simple story through synchronized dance and acrobatic jump roping
- \bullet Integration of animals through simple fly- or walk-throughs
- Celebratory, possibly interactive, high-energy fun



The Jungle Optional: Jungle Theater

Operating Assumptions:

- Our assumption is that this show, as envisioned at this stage of the planning, would be outsourced
- Sponsorship and branding opportunities
- Further discussions on how best to program/utilize if year-round attraction

Operational Cost Projections		
Total Project Budget	\$1,220,000	
Construction Budget Projection	\$826,087	
(net of design & owner's costs)		
Annual Incremental Operating Expenses		\$330,435
Direct Incremental Operating Expenses:		
Theater like performances in high energy format		
Assume seasonal operations that is outsourced		
Liability Insurance		
Maintenance & cleaning of theater		

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven Plus

(Via Direct/Indirect Revenues)

Sponsorship of Show

Member Mornings (increased value)

Additional information will be required to test format and ROI

Fees for selected performances (most)

Increased Stay Time/Per Capita Spending/Repeat Visits

Wild Woods



© Michael Nepper



Wild Woods Concept

Walk through the natural woods on elevated boardwalks for minimal disturbance of habitat. Focus on native flora and fauna, and conservation efforts led by MCZ—a chance to 'show off'. Natural features of the site should be highlighted and enhanced, when possible, to encourage visitors to acknowledge the beauty of the local environment. Interior exhibits allow regular changing of species and messages to highlight important zoo conservation programs, while also serving as introduction to the natural woods beyond. Highly interactive with keepers, providing behind the scenes looks into their days as well as opportunities to meet them and the animals.

Estimate: \$12.4 million total project

Experiential Concept

'Milwaukee County Zoo's Nature Center'

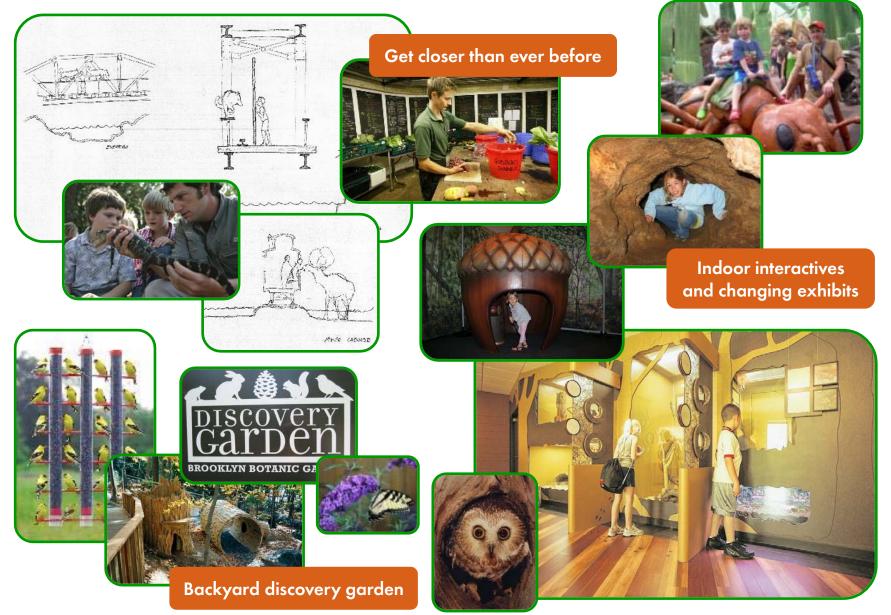
- Winding boardwalks through the woods
- Modern, green architecture similar to entry architecture
- Infusion of humor, whimsy, music, poetry, art—storybook / fairy tale telling of conservation / animal stories especially near 'Visitor Center'—simple, modern graphics (not text heavy)
- Multiple opportunities to interact with keepers / docents



Animal	Pop.	Out. Exhibit: Required	Out. Exhibit: Rec.	Holding: Required	Holding: Recommend.	Pool	Barriers
Moose	8	1800 sf / animal	20,000	150 sf / stall per animal	(8) 10' x 15' stalls	Include a pool deep enough for full submersion (7'); Freshwater	Vertical Wall / Fence: 10'
Cougar	2	200 sf / animal; 100 sf per additional	5,000	N/A	(2) 10' x 10' stalls	N/A	Fully enclosed
Elk	8	1800 sf / animal	20,000	150 sf / stall per animal	(8) 10' x 15' stalls	N/A	Vertical Wall / Fence: 10'
Grey Wolf	5	150 sf / animal; 75 sf per additional	12,000	N/A	(5) 8' x 8' stalls	Shallow pool and/or stream for wading; Max. depth 3'	Vertical Wall / Fence: 8' w/ kickback into exhibit and underground dig barrier
Badger	2	320 sf / 2 animals; 13 sf per additional		240 sf / stall per breeding pair	(1) 16' x 15' stall	N/A	Vertical Wall: 6.5' with kickback of 2.5'; Dig barrier of 2.5'

Modern style, immersed in nature

Wild Woods Concept

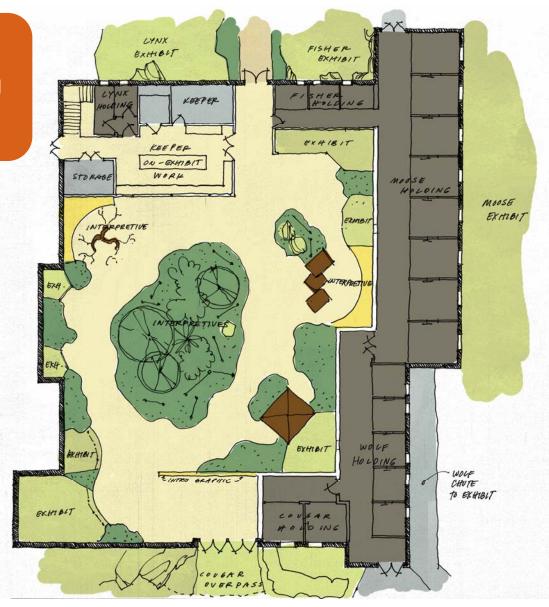


Wild Woods Site Plan

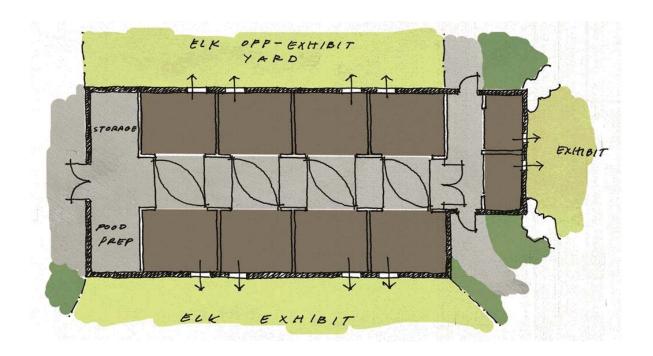


Wild Woods Interior Exhibits Building Floor Plan

Reuse Small Mammal building for exhibits and holding



Wild Woods Elk Holding Floor Plan



Flexible holding building

Wild Woods Business Analysis

Operating Assumptions:

- New animal and interpretive exhibit and experience with higher annual maintenance/replacement costs after initial five years
- Food venues and destination dining integration are critical revenue, branding and stay-time drivers

Operational Cost Projections		
Total Project Budget	\$10,880,000	
Construction Budget Projection (net of design & owner's costs)	\$7,370,958	
Annual Incremental Operating Expenses	\$589,677	
Direct Incremental Operating Expenses:		
Staffing: new animal management		
Additional Interpretive staff (seasonal)		
Additional exhibit/landscape maintenance staf	f (half-person)	

Utilities: water & electric

Animal Food

Insurance: General Liability and Property

Maintenance Supplies

Incremental Operating Revenue Projection

Potential Revenue Opportunities

Breakeven/Plus with Adjacent Food Venue

(Via Direct/Indirect Revenues)

Increased attendance (5% initial year with 2% for additional two years)

Special/Behind the Scene Tours with Fees

 $Adjacent\,food/restaurant\,would\,be\,a\,plus\,for\,stay-time\,and\,increased\,per\,caps$

Exhibit Sponsorship

Increased Stay Time/Per Capita Spending/Repeat Visits

Wild Woods Woody's Restaurant

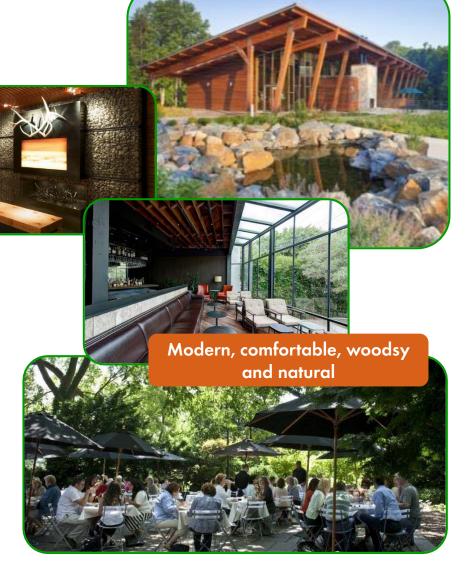
The existing Woodland Retreat restaurant is out of date and under-capacity with no indoor seating, but is located ideally to succeed. The new Woody's restaurant will deliver a thematic experience (based on the Wild Woods concept) in a comfortable atmosphere increasing revenue potential.

Estimate: \$1.5 million

Experiential Concept

'Modern integration with nature'

- Beautiful outdoor setting immersed in the woods
- \bullet Exterior improved to match Zoo's brand & character
- Indoor seating with lots of windows to bring the outdoors in
- •Use of recycled woods and natural materials
- •Menu to feature zoo favorites as well as thematically appropriate items or local specialties
- Restaurant to be themed cohesively with region's storyline and conservation message
- Indoor seating for 85; Outdoor seating for 150
- 4 points of sale; Cart hook-ups outside



Wild Woods Woody's Restaurant Floor Plan



Wild Woods Woody's Restaurant Business Analysis

Operating Assumptions:

- Expansion/renovation of existing facility to position as a "destination gathering spot"
- Per capita spending is incremental as an expansion/renovation project
- Allows for significant improvements in servicing the visitor/guest and providing new product offerings that will support the incremental increases in per capita spending

Operational Cost Projections		
Total Project Budget	\$1,470,000	
Construction Budget Projection (net of design & owner's costs)	\$998,621	
Annual Incremental Operating Expenses		Net of \$\$
Direct Incremental Operating Expenses:		
Seasonal staff as increase in food sales & new product Utilities: electric Expenses are net of per capita sales increases - 30% net		

Incremental Operating Revenue Projection							
Potential Revenue Opportunities (Annual)	\$202,500						
Net Revenues (net of salaries & COG) (Annual)	\$60,750						
(based on \$.15 per cap "incremental" increase on 1.35MM)							
Incremental above current Woody's per cap							
Increase in total food per capita: from \$3.18 gross to \$3.33 (5% increase)							
Per cap spending will continue to increase in future years							
New food offerings, themed eating area and outdoor dinin	g						
Increased Stay Time/Per Capita Spending							

Asian Trail



© Richard Brodzeller



Asian Trail Concept

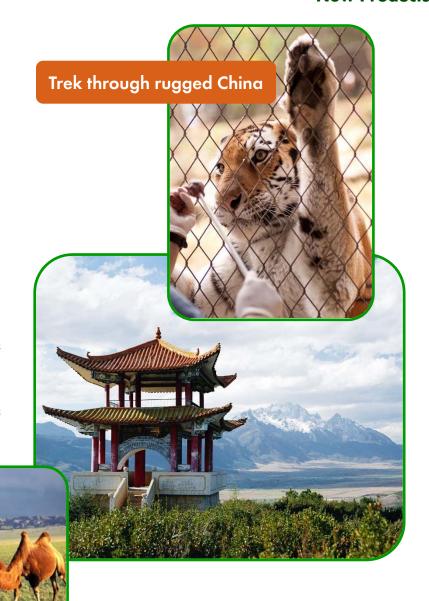
Although the Big Cats building and outdoor Asian exhibits were recently renovated, the existing tiger exhibit needs enhancement by increasing yard area and adding a demonstration training wall. These renovations will allow a loop circulation through Big Cats from the main path near Lake View restaurant.

Estimate: \$3.5 million total project

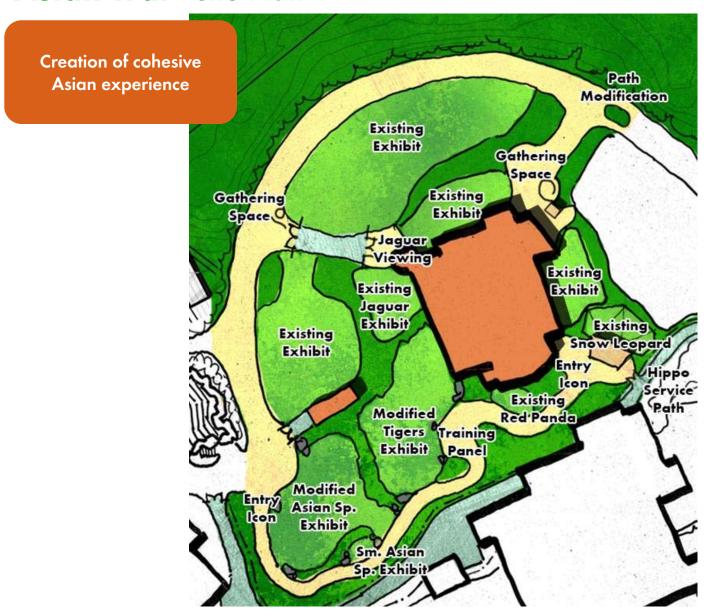
Experiential Concept

'Hike the rugged wilds of northern China'

- Naturalistic exhibits with architectural elements inspired by Chinese aesthetic
- Winding trail through landscape
- Training wall for tigers for demonstrations throughout the day
- Layered views maintained and enhanced



Asian Trail Site Plan



Other Revenue Opportunities

Other Revenue Opportunities

1. Special Tours

Offering a variety of unique special tours, on a seasonal basis with some "behind the scenes" and others front of the house, can attract new audiences and new financial resources. Depending on the number of tours offered and size of the tour group, the Zoo could raise an \$25,000 - \$50,000 annually from these programs while providing engaging visitor, keeper and animal enrichment.

Sneak Peek Tours

1-hour Tour

Zoo Members - \$40

Non-members - \$65 (includes the price of Zoo admission)

This experience includes a behind-the-scenes peek into the back of house animal areas and a meet-the-keeper experience with an expert from the Zoo's animal care team. Tours typically include areas such as the aquarium exhibit, birds, Family Farm and Commissary.

Premiere Tours

1-hour Tour

Zoo Members - \$55

Non-members – **\$80** (includes the price of Zoo admission)

This experience includes a behind-the-scenes peek into the back of house animal areas, a meet-the-keeper experience with an expert from the Zoo's animal care team, and an up-close and personal animal experience. Tours could include animal areas for Birds, Children's Zoo, Giraffes, Aquatic Exhibits, Primates and Reptiles, among others.

Star Treatment Tours

1-hour Tour

Zoo Members - \$90

Non-members – **\$135** (includes the price of Zoo admission) This experience includes a behind-the-scenes peek into the back of house animal areas, a meet-the-keeper experience with an expert from the Zoo's animal care team, and an unforgettable up-close and personal animal experience with the Zoo's most prestigious animal ambassadors. Tours could include animal areas for Cats, Cheetah, Elephants, Rhinos and Sea Lions, among others.



Other Revenue Opportunities

2. Special Experiences

Vet for a Day Experience

Zoo Members – \$200 per person Non-Members – \$240 per person

Spend an exciting morning checking up on the Zoo's animal residents during this exclusive behind-the-scenes experience. Shadow a Milwaukee County Zoo veterinarian as they make their rounds of the Zoo. Experience may include opportunity to watch live medical procedures.

The Zoo Up-Close (could be a specific animal exhibit/area)

1-hour Guided Front-of-Scenes Tour

Zoo Members - \$15

Non-members - \$35 (includes the price of Zoo admission)

Embark on an amazing journey to see and learn about the animals that call the Zoo home – could be a specific area or location.

3. Conservation Bracelets

An alternative approach to raising awareness and resources for the Zoo's conservation efforts while providing the guest with a fun and colorful bracelet. The Houston Zoo is selling these conservation bracelets for \$2 each with many children/parents purchasing more than one of these colorful collectables. The bracelets are primarily sold at the admission booth but visitors may also purchase/contribute at food and retail locations too. In the initial year, the Zoo netted over \$60,000 from this project and is projecting over a \$100,000 net in the second year.

4. Wild Winks

A fun and marketable "sleepover" program for scouts, groups and visitors with fees of \$50 - \$65 per participant. Depending on the number of offerings, location and size of the groups, the Zoo could net between \$15,000 and \$35,000 for this fun program that provides new Zoo audiences with special, behind the scene tour of the Zoo.





Adventure Challenge Course Concept

With the abundant old growth forest on zoo grounds, an immersive adventure challenge course is feasible. The course would allow revenue generation through group and corporate sales as well as individual zoo-goer ticketing.

Estimate: \$350,000 total project

Experiential Concept

'Adventure in the forest'

• Dual high and low adventure ropes course for all ages and groups

• Direct access from parking lot

• Separate admission possibility

• No connection to animal exhibits

• Adjacency to picnic area



Adventure Challenge Course Business Analysis

Operating Assumptions:

- Our assumption is that this attraction is a "turn-key" operation installed and managed by a third-party vendor/operator
- Lower commissions to the Zoo in the initial years due to capital investment by the operator
- Integrates with existing zipline, ropes course and other attractions....positions the Zoo as an "adventure destination" for fun outdoor experiences

Operational Cost Projections	
Total Project Budget	\$350,000
Construction Budget Projection (net of design & owner's costs)	\$236,025
Annual Incremental Operating Expenses	Net of \$\$
Direct Incremental Operating Expenses:	
Assume that this would be outsources to current vend	dor
Zoo receives small/sliding scale commission percent	age as vendor capitalizes the \$\$\$\$
No direct costs to the Zoo	

Incremental Operating Revenue Projection

Potential Revenue Opportunities (Annual)

Less than \$20,000 Net

Per cap spending will continue to increase in future years

No direct cost/expense to the Zoo as all costs incurred by the vendor

Indirect costs for advertising and promoting the course - minor

Increased Stay Time/Per Capita Spending

Destination Restaurant Concept

Table service restaurant with out-of-zoo access and expanded night hours. Connection to animals and / or themed environment increases stay times and attraction power therefore increasing revenue potential. Must be operated through partnership.

Estimate: **\$1.4 million**

Experiential Concept

'Dine with animals'

- Multiple species potential
- Restaurant to be themed cohesively with region's storyline and conservation message
- Multiple viewing opportunities—no bad seat in the house
- Unique menu offering, different from other food venues in zoo...thematically appropriate options, healthy options
- Evening hours
- Indoor seating for 100; Outdoor seating for 32







Destination Restaurant Site Plan



Destination Restaurant Business Analysis

Operating Assumptions:

- Constructed, funded and managed by a third-party with management lease for site
- Commissions payable to the Zoo as "rent" for initial years and then based on percentage of sales (food and liquor) thereafter
- Branding with local restaurant operator would create a win/win
- Ease of access with potential integration of animal exhibits for viewing while dining are keys

Operational Cost Projections							
Total Project Budget	\$1,410,000						
Construction Budget Projection (net of design & owner's costs)	\$953,201						
Annual Incremental Operating Expenses Net of \$\$							
Direct Incremental Operating Expenses:							
Assume that table service restaurant investment is incurred by concessionaire Zoo receives a commission for food and liquor sales - blended rate of 12%							
Access to the restaurant from outside the Zoo to	allow for non-Zoo attendees						

Incremental Operating Revenue Projection

Potential Revenue Opportunities (Annual)

\$50,000 - \$75,000 net

Net will dependent on level of capital investment and term

Need recognizable brand in the local restaurant business to insure success

Dine with the animal theme will be critical for success

Operating schedule, liquor and parking will be operational keys

New Products: Estimate

Overall Estimate

The estimates for each project are to the right. Each major project was broken down into individual components that can be easily phased. These components include revenue opportunities, non-animal attractions, and exhibits.

The project total includes markups for contractor pricing, design contingency (due to the early level of design inherent in master planning), and owner costs (such as marketing, permits, etc.).

Three projects are not included in the total master plan cost: Destination Dining, Adventure Challenge Course, and Show. The Destination Dining and the Challenge Course are likely to be built through a private partnership and therefore shall not affect the bottom line. The Show is left as an alternate for the The Jungle and will only be included if Picnic and Play are deleted.

See Appendix A for the complete detailed estimate.

n	ı	Base Cost		ontractor Markups 18%	c	oni	Design tingency 20%		er Costs ocations 23%		Sub-Totals	Project Tota
Project				18%			20%		23%			
Adventure Africa												\$ 23,200,000
Adventure Africa: Elephants	\$	8,425,724	\$	1,517,678		\$	1,988,681	\$	2,744,379	\$	14,680,000	
Adventure Africa: Rhino	\$	4,892,550	\$	881,268		\$	1,154,764	\$	1,593,574	\$	8,520,000	
The Jungle												\$ 15,480,000
The Jungle: Core Experience	\$	6,555,243	\$	1,180,759		\$	1,547,200	\$	2,135,137	\$	11,420,000	
The Jungle: Plaza	\$	1,969,272	\$	354,714		\$	464,797	\$	641,420	\$	3,430,000	
Apptraction	\$	360,000	\$	64,845		\$	84,969	\$	117,257	\$	630,000	
Alaska's Cold Coast												\$ 31,440,000
Alaska's Cold Coast: Sea Lions	\$	9,330,356	\$	1,680,625		\$	2,202,196	\$	3,039,031	\$	16,250,000	
Alaska's Cold Coast: Polar Bears	\$	8,287,928	\$	1,492,858		\$	1,956,157	\$	2,699,497	\$	14,440,000	
Bear View Restaurant	\$	150,000	\$	27,019		\$	35,404	\$	48,857	\$	260,000	
Bear Garden	\$	279,500	\$	50,345		\$	65,969	\$	91,037	\$	490,000	
Wild Woods												\$ 12,350,000
Wild Woods	\$	6,245,916	\$	1,125,042		\$	1,474,192	\$	2,034,384	\$	10,880,000	
Woody's Restaurant	\$	846,200	\$	152,421		\$	199,724	\$	275,619	\$	1,470,000	
Escape to the Islands												\$ 11,550,000
Escape to the Islands	\$	6,633,627	\$	1,194,878		\$	1,565,701	\$	2,160,667	\$	11,550,000	
East Entry Experience												\$ 6,540,000
East Entry Retail	\$	1,832,777	\$	330,128		\$	432,581	\$	596,962	\$	3,190,000	
Penguins / Tram Path	\$	542,252	\$	97,673		\$	127,985	\$	176,619	\$	940,000	
Parking & Admissions Change-Over	\$	1,383,250	\$	249,157		\$	326,481	\$	450,544	\$	2,410,000	
The Farm												\$ 4,430,000
Farm Store & Deli	\$	524,792	\$	94,528		\$	123,864	\$	170,932	\$	910,000	
Farmhouse Desserts	\$	486,500	\$	87,631		\$	114,826	\$	158,460	\$	850,000	
Splash Pad	\$	700,000	\$	126,087		\$	165,217	\$	228,000	\$	1,220,000	
Farm Walk-About & Site Improvements	\$	830,443	\$	149,583		\$	196,005	\$	270,487	\$	1,450,000	
Asia Trail												\$ 3,490,000
Asia Trail	\$	2,003,295	\$	360,842		\$	472,827	\$	652,502	\$	3,490,000	
West Entry												\$ 6,995,594
West Entry	\$	2,490,000	\$	448,510		\$	587,702	\$	811,029	\$	4,340,000	
Train Gift Shop												\$ 170,000
Train Gift Shop	\$	96,517	\$	17,385		\$	22,780	\$	31,437	\$	170,000	
Total (rounded)	\$ 6	4,350,000	\$ 11	,590,000	\$	15	,190,000	\$ 20,	.960,000	\$ 11	2,990,000	
Destination Dining	\$	807,712	\$	145,489		\$	190,640	\$	263,083	\$	1,410,000	
Adventure Challenge Course	\$	200,000	\$	36,025		\$	47,205	\$	65,143	\$	350,000	
Show	\$	700,000	\$	126,087		\$	165,217	\$	228,000	\$	1,220,000	

New Products: Design Guidelines

Design Guidelines Green Practices

Sustainable Site

A. Site selection and design

- 1. Reuse existing buildings and site structures wherever possible Reuse sites, if contaminated, restore to useful condition
- 2. Minimize disturbance to microhabitats
- 3. Design structures for minimum footprint and shadow casting
- 4. Minimize driving and parking surfaces
- 5. Avoid extensive regrading and use of retaining structures, If can not be avoided, use local materials like stone from the excavation
- 6. Incorporate existing mature trees into exhibits and maximize their use for shading of habitats, protect trees during construction and from severe damage by animals

B. Construction procedures

- 1. Minimize construction waste; separate to facilitate efficient recycling
- 2. Prevent loss of fertile soil due to erosion, properly store and reuse topsoil
- 3. Do not bury materials which might contaminate the soil
- 4. Reduce disturbance to existing vegetation

C. Storm water management

- 1. Limit disruption of natural water flows
- 2. Protect site runoff from contamination with exhibit runoff
- 3. Promote storm water absorption into the soil
 - a. Maximize planted areas
 - b. Design for slow sheet flow across permeable surfaces
 - c. Select permeable paving products for driving surfaces

4. Delay discharge by use of retention devices

- a. Green roofs
- b. Natural runoff detention and filtration devices, like wetlands, vegetated filter strips or bioswales

D. Landscaping

- 1. Maximize biodiversity
- 2. Select native plants, if themed effect is desired, select native plants which resemble an exotic ecosystem
- 3. Avoid introducing even mildly invasive species of plants Select plants neutral and non-toxic to animal species
- 4. Select drought resistant plants (see Water Conservation), thriving on natural fertilizers, requiring no pesticides

Water Conservation

A. Equip exhibit and landscaping pools with filtration systems, do not dump and fill with fresh water

B. Reduce wash down

- 1. Design facilities for efficient wash down using highpressure equipment
- 2. Use gray water wherever possible

C. Reduce irrigation

- 1. Reduce or eliminate irrigation by installing droughtresistant landscaping
- 2. Use gray water for irrigation away from public contact
- 3. Use high efficiency, drip-irrigation activated by a moisture sensor
- 4. Turn off irrigation after plants have established themselves

D. Innovative waste water technology

- 1. Use High-efficiency fixtures, like waterless urinals
- 2. Gray water
 - a. Collect rainwater from roofs, store in cistern, use for irrigation, wash down or sewage conveyance



Design Guidelines Green Practices

- b. Flush toilets with water collected from nonsewage building uses
- 4. On-site wastewater treatment
 - Composting toilets, use solids in compost or to fertilize landscaping
 - Sewage treatment by bio-filtration, which will naturally process the waste via soil filtration, plant biology, and bacterial action—could become a living wetland exhibit

Energy Conservation

- A. Efficient lighting
 - 1. Utilize day-lighting techniques, reduce reliance on artificial lighting
 - 2. Specify energy efficient lighting
 - 3. Install dimming devices with daylight level and/or occupancy sensors
- B. Efficient indoor environment control
 - 1. Passive
 - a. Orient buildings to take advantage of prevailing natural wind and
 - b. exposure to sun
 - c. Locate wall and roof openings to prevent exposure to summer sun from entering building, allow low winter sun to warm interiors, design facility for passive heat gain
 - d. Utilize natural ventilation, reduce or eliminate need for HVAC systems
 - e. Install high efficiency insulation and moisture control
 - f. Use green roof for cooling effect
 - g. Use thermal building mass to even out daily temperature fluctuations

2. Active

- a. Do not over-design HVAC systems, accept small compromises in interior thermal comfort during extreme temperature days, use computer modeling to accurately size the equipment
- b. Specify high efficiency HVAC technology with permanent monitoring system
- c. Perform System Commissioning, verify that the building systems are installed and calibrated as intended
- d. Install floor radiant heating versus air-based system

Renewable Energy

- A. Passive solar heating
 - 1. Pre-heat water for buildings use
 - 2. Heat exhibit water
- B. Solar photovoltaic power generation
 - 1. Solar electric generation through photo voltaic cells (PV), which convert sunlight into electricity.
 - 2. PV cells can be assembled into panels installed on the roofs or incorporated into roofing materials like roof tiles
- C. Geothermal heating and cooling
 - 1. Ground source system, exchanging thermal energy with the earth through vertical or horizontal wells
 - 2. Water source system, exchanging thermal energy with ground water in closed loop or through ducts installed in open body of water
- D. Wind power generation
 - 1. Incorporate electricity harvested by wind turbines designed for small commercial applications
- E. Biomass gasification
 - 1. Thermally converting biomass from zoo organic waste to gasified fuels for power, heat or electricity generation

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Design Guidelines Green Practices

F. Storage of energy

- 1. Solar and wind power sources are intermittent and often generate energy spikes which can not be fully utilized, interrupted by periods of no generation
- 2. System yield can be increased by:
 - a. Channeling surplus of energy to the power grid through a net-meter, combined with power buyout program provided by local utility
 - Energy storage devices like a set of high-capacity batteries

Materials and Resources

- A. Reduce waste hauled to landfill
 - 1. Request recyclable packaging or no packaging for transported products
 - 2. Recycle
 - a. Prepare recycling program. Identify materials which can be collected and separated; educate staff
 - b. Identify local handlers or buyers of recyclable materials and available financial incentives
 - c. Designate convenient area for collection and storage of recyclables
 - d. Employ technologies facilitating recycling like chutes, aluminum can crushers, and cardboard bailers
 - 3. Return organic waste as nutrients to zoo ecosystem
 - Identify organic biomass available on the property which can be effectively composted; including food service waste and animal solid waste
 - b. Prepare program for processing and fertilizing landscaping with composted biomass sources

B. Building Materials

- 1. Choose materials from proven renewable resources, preferably from rapidly renewable biomass
- 2. Use biodegradable or easily recyclable materials
- 3. Use building materials fabricated with as much recycled content as possible
- 4. Seek materials requiring minimum energy input for fabrication
- Choose locally fabricated materials, from locally obtained resources
- 6. Use materials free from biotoxins
- 7. Wood
 - a. Use wood from sustainably harvested sources
 - b. Avoid using treated wood; use species naturally resistant to decay
- 8. Plastics
 - a. Minimize use of plastics containing PVC (poly vinyl chloride)
 - b. Use products with post-consumer content and/or are recyclable
- 9. Finishes
 - a. Use low-VOC, low toxicity coatings
 - b. Use finishes fabricated with recycled content
 - Use finishes fabricated from agricultural products, like Linoleum flooring, manufactured from cork, linseed oil, wood flour and pine resin (therefore fully biodegradable)
 - d. Avoid epoxy-based coatings
- 10. Ozone-depleting chemicals
 - a. Specify refrigeration and fire suppression that use no HCFCs and Halons
 - b. Replace HCFCs and Halons with new generation refrigerants when conducting maintenance



Design Guidelines Exhibits

As new exhibits are designed and constructed, the following shall be considered:

Enrichment

- A. Enrichment goals shall be discussed and planned during the conceptual and schematic phases of exhibit design.
 - Keepers with first-hand knowledge of the animals in the exhibit will join designers in defining behavioral goals and brainstorming how these goals may be achieved through physical design as well as operations.
 - 2. These sessions may yield innovative new ideas which may be tested, implemented, documented and published to the zoo community.
- B. Enrichment shall be considered a critical component to a successful and engaging guest experience.

Bringing 'Back of House Forward'

- A. Whenever possible, exhibits shall showcase the high quality of care espoused by the Milwaukee County Zoo through planned VIP back of house tours, training panels, and behind-the-scenes 'exhibits' among other ideas.
 - Back of house tours require planning as to how the tour will occur (to what areas will be available to tour) and provide plenty of space for groups of maximum of 10 guests.
 - a. This may require enhanced gathering spaces, viewing windows and walking paths larger than typical back of house areas require.
 - b. Other safety considerations may be required.
 - 2. Training panels (see also Enrichment) allow keepers to work with animals in full public view.
 - a. Training panels shall incorporate audio support and widened visitor paths to allow groups to gather and watch while others may still pass by.

Conservation Messaging

- A. Each exhibit experiential storyline will be directly linked to a conservation message and shall be delivered both through environment (setting) as well as through formal interpretation.
 - 1. Storyline and educational goals will be developed concurrently at the conceptual & schematic design levels, and all stakeholders shall have buy-in on these concepts.
 - 2. Interpretation shall occur through multiple delivery methods, ensuring all levels and types of learning are addressed.
 - Graphics shall utilize clear hierarchy with the big idea shown in largest and concisely followed by various levels of information.
 - b. Every effort shall be given to include at least one interpretive hitting the major categories below:
 - a. Graphics
 - b. Play
 - c. Intrapersonal (keeper chat, show)
 - d. Video
 - e. Interactive, Digital
 - f. Interactive, Analog / Mechanical
 - 3. Interpretation shall provide specific steps guests may follow in order to 'take action' either at home or at the zoo.

Habitat

- A. To fit with the Zoo's brand and character, all animal exhibits shall be naturalistic and focused on the habitat of the animal it houses. Architecture and theming shall not be overwhelming, and as appropriate, may be limited to guest areas.
- B. As often as possible, exhibits will utilize natural substrate floors with multiple substrate options.
- C. When feasible, vegetation shall mimic those found in the animals' natural habitat.

Design Guidelines Greenspace

As identified in Analysis, one of the greatest resources of the Milwaukee County Zoo are the large forested zones throughout the site and especially along the northern edge of the property. In order to ensure longevity of the character of the site and continue to provide wildlife habitat—which aligns with the Zoo's mission—careful planning of the forested areas must be defined.

Old Growth Forest

- A. Construction within these zones with the express intent of maintaining the Old Growth Forest shall conform to the following:
 - 1. No trees over 3" caliper shall be removed unless showing visible signs of distress or death
 - 2. Construction requiring heavy equipment shall not occur within the dripline of mature trees
 - 3. No grades shall be adjusted / disrupted
 - 4. Soft construction techniques (ie use of hand tools) may occur anywhere within the forest as long as above requirements are met
- B. Major disturbance to these areas, especially those contiguous with other forested areas and / or areas near to ephemeral ponds, shall be kept minimal. The following considerations shall be weighed when deciding to construct in or near Old Growth Forest:
 - Benefits of construction in this location outweigh negatives of loss of forest in terms of enhancing guest experience, increasing revenues and mission achievement, increasing animal welfare, etc.
 - 2. Location of disturbance does not inhibit wildlife migration between other forested areas of the Zoo
 - 3. Location of disturbance is not within 100 feet of ephemeral pond
 - 4. Awareness that construction within 100 feet of Old Growth Forest will result in mature forest die-off
- C. No construction road shall pass through Old Growth Forest Areas in order to reach a construction site

Landscaped or Open Space

- A. Existing landscape pockets and open spaces (ie lawns with sparse trees) may be reused at will and are, in fact, preferred areas for future development and disturbance
- B. Disturbance of any Old Growth Forest may require turning over of Landscaped Areas to long-term native growth / rehabilitation to offset forested loss
- C. Newly developed Landscape and Open Spaces shall include a minimum of 20% 3"+ caliper trees and shall use a minimum of 50% native plants

Design Guidelines Wayfinding

Main Path

In order to improve the guest experience and ensure the majority of guests are guided to the front doors of each exhibit and revenue opportunity, the master plan recommends an enhanced and simplified main path throughout the Zoo. The main path improvements shall be completed within larger projects of the master plan over time.

An intentional main path through the Zoo will only benefit guests if the path is clearly visible to them. Therefore, the main path will have the following attributes:

- 1. The path will maintain a consistent width of 16' 25'
- 2. The use of color and texture shall be consistent throughout the Zoo and will meet ADA accessibility standards
- 3. Curbs are preferred
- 4. Wayfinding graphics will be consistent and clearly legible
- 5. Pathway lighting will be consistent in design and frequency

Pedestrian Bypasses

Pedestrian bypasses offer opportunities for visitors to bypass a venue as they move about the Zoo grounds. These secondary paths can also help frequent visitors manage their time and itinerary, and prioritize their interests. Bypasses will not offer experiences that cannot be seen from the main path.

Visitors will identify bypasses by consistent attributes:

- 1. The paths will maintain a consistent width of 10' 15'
- 2. The use of color and texture shall differ significantly from the Zoo main path; each bypass may incorporate characteristics from the thematic region in which they fall or take on a more generic zoo-brand identity
- 3. Wayfinding graphics will be consistent and clearly legible
- 4. Pathway lighting will be consistent in design and frequency

- 5. Bypass entries may be considerably smaller in width than the rest of the path in order to minimize the importance of the path at critical decision points / intersections especially where existing paths are being converted into bypass or secondary pathways
 - a. Use of potted plants and / or planters may contribute to this 'path minimization' when necessary

Exhibit Paths

Exhibit paths are those paths within the core experience of animal attractions. Guests will actively engage with animals and viewing areas from these paths. As such, each thematic region will have its own brand / identity / characteristics determined by the storyline of the exhibit experience.

Although each exhibit path may be considerably different from another, all exhibit paths shall have the following attributes:

- 1. The paths will vary in width throughout the zoo and throughout each exhibit allowing for a varying experience and for group gathering as needed at large viewing, keeper chat, show areas, etc.
- 2. The use of color and texture shall be an integral component of the path design representing immersive story
- 3. Wayfinding graphics will be consistent throughout the animal exhibit and will be clearly legible
- 4. Pathway lighting will be consistent throughout the animal exhibit and will be thematically appropriate to the region
- 5. Every effort shall be made to avoid drain placement immediately adjacent to viewing windows
- 6. Outdoor paths must ensure snow plow access and locate snow collection areas
- 7. Exhibit paths shall be planned as much as possible to allow a loop experience whereby guests exit the exhibit as near to the entry as is feasible



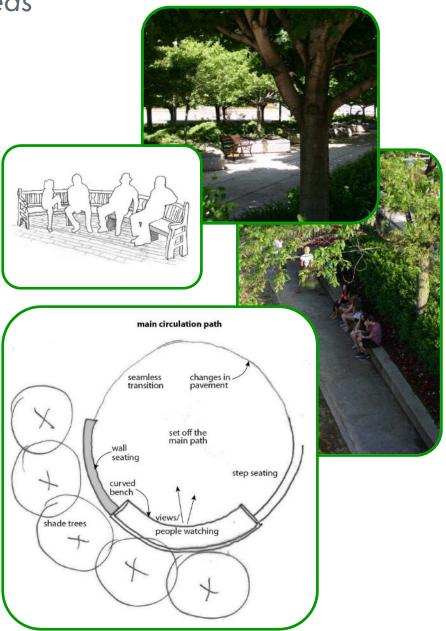
Design Guidelines Rest Areas

Providing for respite--a chance to slow down and take five--along the exhibit route is important. Places to sit are much appreciated by guests, especially older visitors, pregnant women and most guests on hot humid days. Formal rest areas should be set a bit off the path so as not to obstruct efficient pedestrian flow. These can be designed as alcoves with a path edge setback of 4'-6' to account for personal or family space, with benches and with a change in pavement. Rest area sizes and number of people accommodated can vary, but placing these formal rest stops at regular intervals of 150'-300' can again add a visual cadence, and reassurance that if one rest area is occupied there is another just up around the bend.

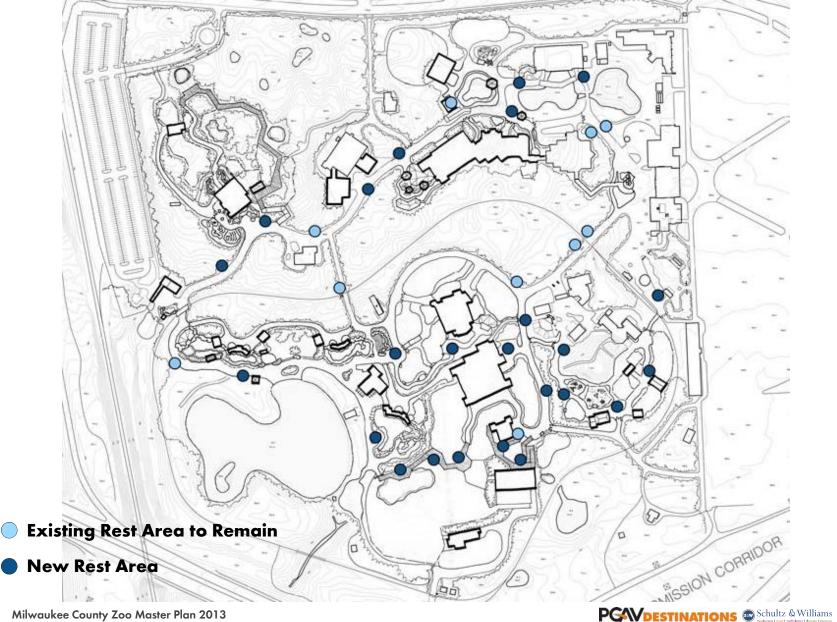
Alternatively or additionally, seating can also be incorporated in an informal way. By virtue of design placement, visitors can be encouraged to use landscape walls or steps as places to sit. Walls and steps integral to the landscaping need only be widened to 12" to serve as places of rest. These have the added benefit of not having a vacant appearance when not used for sitting.

The most coveted seating is often at points along the way where the location is a bit raised above the path and has prospect. It should allow for a vista out into the landscape, into an animal habitat or should be oriented to allow people watching. Some seating locations should be designed to take advantage of sunshine and wind break on cool days. These should be coordinated with selection of seating materials that help users retain their body heat in cold weather and shed it in hot weather.

During the winter, many of these rest areas shall be amended to provide a warming station. This may include temporary heaters and enclosed tent structures. The locations of these warming stations will be determined based on the phasing plans.



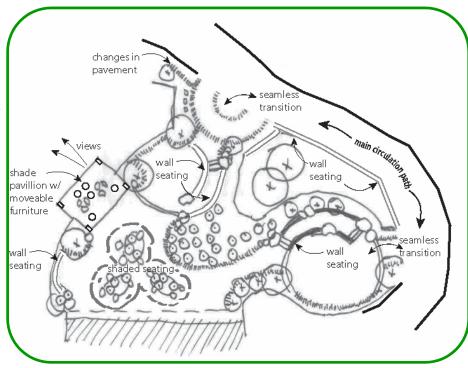
Design Guidelines Rest Areas



Design Guidelines Gathering Spaces

Families and organizations attending the Zoo often number 4-12 people or more. Main exhibits should make accommodation for families or small teams, classes or other organizations to gather, regroup, rest and refresh. Ideally this space occurs in a location that can be used on arrival or departure from an exhibit though larger exhibits should provide multiple separate spaces. At 30 - 40 S.F. per person the clear area provided could range from 120 – 480 S.F. with a space proportion not greater than 3:5. So pedestrian flow is not compromised, the spaces should not overlap the exhibit access route. Other location determinants should include functional proximity to restrooms, drinking fountains, and perhaps food & beverage dispensers and concessions.

For small group gathering areas, the same seating considerations mentioned under Rest Area Guidelines apply. Multiple segment seating with inside corner configurations are preferred for encouraging / accommodating user interaction. Adjacent flowers, grasses and shrubs can be used to enrich the sensory experience. Lighting, contrasting paving materials to define the floor plane and overhead elements (see Shade Guidelines) subtly integrated into the exhibit / landscape setting will help make these small group gathering areas distinct and comfortable places. Several of these spaces shall be used seasonally as warming stations and shall be designed for ease of conversion via addition of temporary walls and heaters.

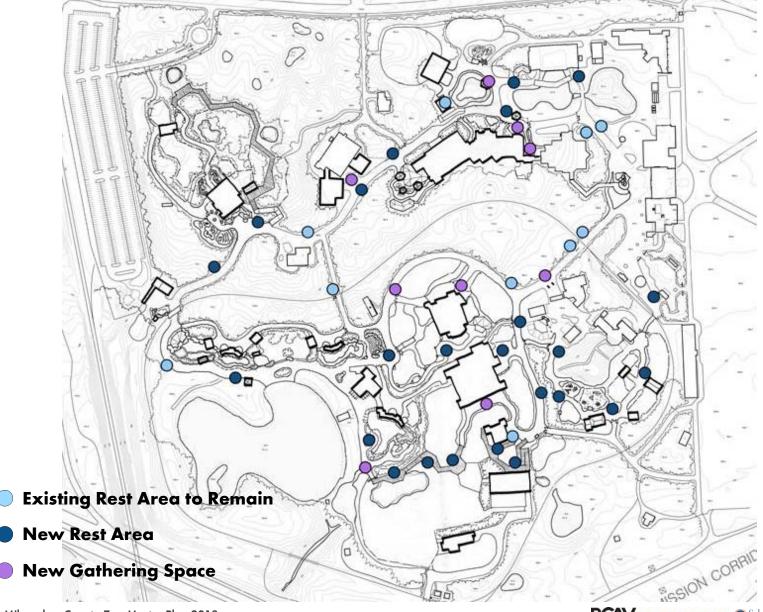








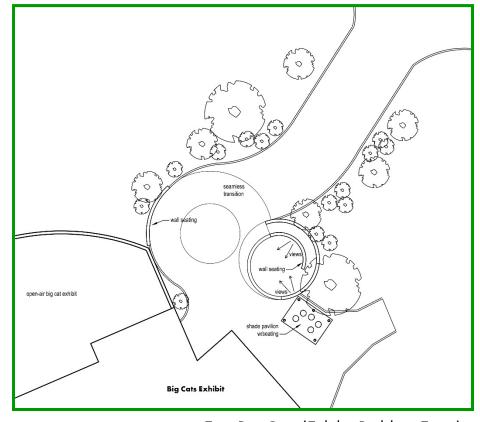
Design Guidelines Gathering Spaces



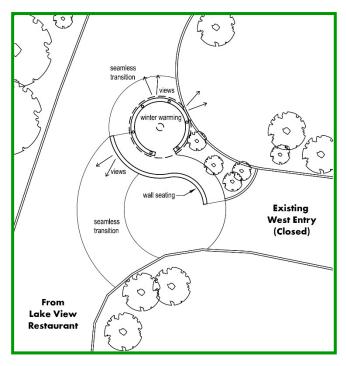
Design Guidelines Gathering Spaces

The designs below are intended as renovations to the Big Cats area and shall be undertaken as part of the Asian Trail or as a small project unto itself. The West Gathering Space shall double as a warming station and is designed to allow addition of canvas side panels to the shade structure.

Major Gathering Spaces shall be included with The Jungle and Escape to the Islands. The designs for these two areas are included within the floor plans for each concept area.



East Big Cats (Exhibit Building Entry)



West Big Cats



West Big Cats as Warming Station



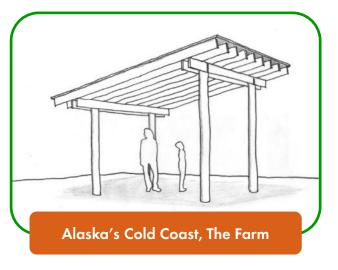
New Products

Design Guidelines Shade

Given that the preponderance of Zoo visits take place in the warm and sometimes humid months, it's important to offer rest areas in the shade. Naturally existing trees, where they are retained, can play a major role in addressing rest area shading. Alternatively overhead structures can be placed to manage sun exposure. These can range from pavilions in rustic or even primitive forms, to pergola structures, and colorful, lightweight cable supported sails or tents. Carefully designed, well-crafted and enhanced by lighting, these elements can be thematic and become landmarks aiding in place-making and wayfinding.

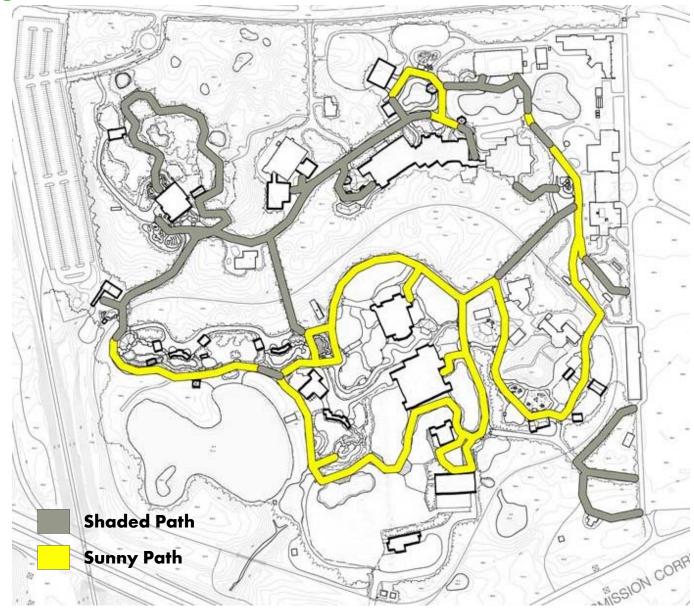






New Products

Design Guidelines Shade



Design Guidelines Railings and Fences

Throughout the Zoo, railings as handrails and as fences are necessary. Visual and thematic consistency is critical to place-making and identity.

Zoo-wide, designated rail and fence designs will reflect the brand identity and shall be designed and implemented within new projects. Along with this, each new thematic region shall identify a standard railing and fence design (with variations) that reflects the character of the thematic place. Within thematic regions, only the thematic railings and fences will be used. Outside of clearly thematic regions, or in back of house areas, the zoo brand identity designs shall be used.

These railings and fences will be documented and available for future reference and repairs to ensure continuity.

Summary

The facility master plan is a 25-year "roadmap" for the Milwaukee County Zoo. Given that visitor expectations and animal management approaches will continue to change, improve and/or evolve in the years ahead, leadership of the Zoo and Zoological Society should focus on creating and implementing a plan of action that identifies a viable capital investment funding strategy for the next ten years (2014 – 2023).

We recognize that there is a significant number of capital funding initiatives proposed within the Milwaukee region. However, based on the Zoo's and Society's prior and current fundraising success, we believe that a goal of identifying and raising \$84MM of funding support over the next ten years for the Milwaukee County Zoo is both realistic and attainable. The initial steps in fulfilling this goal are critical:

- Buy-in and support of County leadership;
- Engagement of the Society's Board leadership and a Fundraising Committee of community leaders and stewards;
- Commitment to a ten-year funding partnership between the County and the Society; and
- A strong and compelling case for support that tells and sells the Milwaukee County Zoo's story...its mission, vision and success.

The \$86MM campaign goal will only be achieved through a creative and engaged public/private funding partnership between the County and Zoological Society. We believe that the previous 50/50 funding partnership is a fair and equitable model that provides a compelling case to donors to support the Zoo. Although there are numerous successful funding models for Zoos – all tailored to the needs and capacity of the respective zoos and their communities, we have provided a brief overview of other successful models that has served our clients in fulfilling their capital investment needs:

- <u>Hogle Zoo (Salt Lake City):</u> 75/25 partnership with the County providing 75% of a \$44MM capital investment in 2008. The Zoo is currently exploring a new \$66MM capital investment with the County for November 2016.
- <u>Dallas Zoo</u>: 80/20 partnership with the City providing over \$21MM of a \$26MM capital investment to build the Zoo's new Giants of the Savanna exhibit.
- <u>Louisville Zoo</u>: 20/80 partnership with the Metro government providing approximately \$2MM of a \$10MM short-term leadership campaign to position the Zoo for future growth and development while a new facility master plan is developed.
- Memphis Zoo: 40/60 partnership with the City that in total
 has leveraged over \$143MM in capital investments for the
 Zoo a significant portion of the "private investment" was
 led by FedEx who has invested significant resources into the
 Memphis Zoo and other local and regional cultural initiatives.

Roll-Out Plan Use of Funds

The "use of funds" rollout plan for the next ten years is shown in the table based on the 25-year roadmap outlined. The total funding required for the first five years is \$57MM and the total required over the ten years (2014-2023) is \$84MM. The years reflected in the table indicate the year in which the project/exhibit would open and not when funds are required from a cash flow need.

We have anticipated that the Alaska's Cold Coast (Sea Lions) project would most likely shift to 2023 for a number of reasons:

- Adventure Africa will be a major visitor and animal attraction with strong branding, awareness and market appeal that will drive the Zoo's attendance for at least 2 – 3 years after completion. The phasing of Adventure Africa could also shift by a year – completing in 2020 instead of 2019.
- Given the funding requirements of Sea Lions (\$16.3MM) and the
 potential fundraising competition within the region, we believe
 having three years after Adventure Africa to identify and raise the
 required funding makes strategic sense.
- The new Sea Lion exhibit is a great way to complete the first ten years and to launch the next ten years with donors and County leaders creating fundraising momentum for securing the necessary funding for the remaining facility master plan projects.
- If private (Society) and County funding can be identified and secured faster than the three years, the Sea Lion project could be implemented prior to 2023.

The "use of funds" includes the following assumptions:

- An annual allocation for \$1MM for infrastructure improvements within the Zoo
- An annual 2% inflation factor to reflect increases in construction costs over the ten years
- An allocation of \$7MM for the West Entry that will be required due to the highway improvements impacting the Zoo's main parking lot
- An allocation of \$1.5MM for shifting the Zoo's current arrival sequence from the parking lot admissions system to a single-source point of sale admissions at the Zoo's main entries (East and West).
- The project estimates/budgets are inclusive of construction costs, contractor mark-ups, owner's contingency and soft costs related to design and professional services.

Roll-Out Plan Use of Funds

The ten-year build-out with program and/or exhibit openings is noted below with major exhibits highlighted in "bold" and revenue initiatives noted in italic font:

Note: A breakout of the visitor experience projects identified for 2019 (highlighted in yellow) as separate funding sources could be identified to support these initiatives. We have assumed that the County would fund the improvements related to the relocation and construction of new administrative offices as this current space will be utilized to increase visitor spending and engagement.

	10 year MP									
MCZ 10-year MP Build-out	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2014West Entry / Parking		\$7.0								
2015 Hippo		\$9.6								
2016 Woody's Restaurant			\$1.5							
2017 Farmhouse Desserts				\$0.9						
2017 Splash Pad				\$1.2						
2017 East Entry Retail				\$1.2						
2017 Relocation of Administrative Offices				\$2.0						
2017 Admissions / Parking Change Over / Penguins				\$3.3						
2018 Adventure Africa: Elephants					\$14.7					
2019 Adventure Africa: Rhinos						\$8.5				
2020 Farm Store & Deli							\$0.9			
2021 Train Gift Shop								\$0.2		
2023 Farm Walk-About & Site Improvements									\$1.5	
2022 Alaska's Cold Coast: Sea Lions										\$16.3
Master Plan Capital:										
Total Capital Program by Year (in millions)	\$0	\$17	\$1	\$9	\$15	\$9	\$1	\$0	\$1	\$16
Infrastructure Improvements: Roads, Utilities, etc.	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
2% Investment by Year with Inflation 2%	\$1	\$18	\$3	\$10	\$17	\$10	\$2	\$1	\$3	\$20
Total Cumulative Capital Investment	\$1	\$19	\$22	\$32	\$49	\$59	\$61	\$63	\$65	\$86
			First 6 Years:		\$59	ММ				

Master Plan Total with Inflation

First 10

\$86_{MM}

Roll-Out Plan Cash Flow

The cash flow requirements for each of the master plan projects identified for the next ten years is outlined in the table below with major exhibits highlighted in "bold" and revenue initiatives noted in italic font:

The cash flow projections include ~\$8.9MM in revenue projects related to food and retail services and train and splash pad experiences with \$1.5MM allocated within this total for the admissions changeover from the parking lot to a single source point of sale entry.

					10 ye	ar MP								
MCZ 10-year MP Build-out: Cash Flow	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023				
West Entry / Parking	\$5.0	\$2.0												
2015 Нірро	\$2.0	\$7.6												
2016 Woody's Restaurant		\$0.6	\$0.9											
2017 Farmhouse Desserts			\$0.5	\$0.4										
Splash Pad			\$1.0	\$0.2										
East Entry Retail			\$2.0											
Relocation of Administrative Offices			\$1.0	\$1.0										
2017 Admissions/Parking Change Over / Penguins			\$1.0	\$2.3										
2018 Adventure Africa: Elephants		\$0.8	\$2.9	\$3.7	\$7.3									
2019 Adventure Africa: Rhinos			\$0.8		\$3.4	\$4.3								
2020 Farm Store & Deli						\$0.5	\$0.4							
2021 Train Gift Shop								\$0.2						
2022 Farm Walk-About & Site Improvements								\$0.8	\$0.7					
2023 Alaska's Cold Coast: Sea Lions								\$1.7	\$6.5	\$8				
Master Plan Capital:														
Total Capital Program by Year (in millions)	\$7	\$11	\$10	\$8	\$11	\$5	\$0	\$3	\$7					
Infrastructure Improvements: Roads, Utilities, etc.	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1					
2% Investment by Year with Inflation 2%	\$8	\$12	\$12	\$9	\$13	\$6	\$2	\$4	\$10	\$				
Running Total of Capital	\$8	\$20	\$32	\$41	\$53	\$60	\$61	\$65	\$74	\$				
			First 6	\$60										

Years: \$60 MM

Master Plan Total with Inflation

First 10 Years:

\$86 мм

Roll-Out Plan Source of Funds

<u>Funding Assumptions for the Identified Facility Master Plan</u> <u>Projects</u>

- <u>West Entry/Parking</u>: the new West Entry and Parking improvements (\$7MM) will be funded by a reimbursement from the highway improvement project
- <u>Hippo Exhibit with its projected budget of \$9.6MM</u>: will be funded by the County, the Zoological Society, and a Dedicated Donor. For the purposes of our reporting within the following tables, we have allocated the \$5MM from the dedicated donor to the "other" source category.
- <u>Infrastructure Improvements:</u> funded by County via its deferred maintenance/capital improvements funds; estimated at \$1MM annually
- Endowment/Planning Giving Program: funded by the Society via its donors; the cash flow or source of funds do not include endowment projections although a key fundraising strategy for the Society as the Zoo/Society must create a future funding source of the proposed new projects
- Revenue/Partner Projects: the cash flow projections have identified \$6.2MM in revenue programs (the admissions changeover of \$2.4MM will be shared between the County and Society) for the next ten years. The revenue projects will provide the Zoo with new incremental and sustainable operating revenues generated through new visitor/member spending, specifically in new food service, retail and fun experiences (Splash Pad). The Zoo could explore "partnerships" in food and retail operations with the partner providing all or part of the capital investment identified for the revenue programs.
- Major Animal Projects: MCZ and MZS share in partnership with 50/50 funding – funding from the County maybe "front-loaded" over the construction schedule to allow the Society to raise private support dollars.

Major Projects: priorities

- Hippos opening in 2015 total budget of \$9.6MM
- West Entry and new Parking completed in 2015 at a total budget of \$7MM – funded by the highway improvement project
- Adventure Africa Phase I opening in 2018 (\$14.7MM) with potential second phase in 2019 (\$8.5MM) – total budget of \$23.2MM
- Alaska Cold Coast sea lions (phase 1) total budget \$16.3MM with only phase 1 completed in 2023 to launch the next ten year capital investment campaign

Revenue Projects: priorities

• Splash Pad, Woody's and Farmhouse Desserts are high on the list; new East Entry retail (expanding the existing retail shop and its location) should be linked to the admissions system changeover which is programmed for completion by 2017 and is a high priority; through preliminary discussions with food and retail partners, the Zoo can assess opportunities, and the timing, of entering into a partnership for these and other visitor-related services and functions.

Minor Projects/Infrastructure Needs

 Assume that the Zoo allocates \$1MM annually to support these needs

Zoos across the country have been successful with creating and implementing regional funding models, with voter support, that are either sales tax or property tax based initiatives. Successful models include the Oklahoma City Zoo, the Hogle (Salt Lake City) Zoo, Denver Zoo, Point Defiance (Tacoma, WA) Zoo & Aquarium and Saint Louis Zoo, among others.

Operating Projections Revenue

Operating Revenue Projections: 2014 - 2019 with Pricing and Attendance Allocations and Annual Growth Notes

Note: Fiscal Year 2014 preliminary operating budget projections reflect the base year

•	2014	2015	2016	2017	2018	2019	
				Splash Pad &			
		Hippos &		Seasonal &			
Visitor Experience	Rays	West Entry	Hippos	East Arrival	Jambo #1	Jambo #2	Notes
Admission Profile:							
Adults NC	\$14.25	\$15.00	\$15.00	\$15.00	\$17.00	\$17.00	\$10.35 Paid p/c
Child NC	\$11.25	\$12.00	\$12.00	\$12.00	\$14.00	\$14.00	
Paid	45%	42%	42%	42%	40%	40%	3250
Members	47%	50%	50%	50%	52%	52%	
Free	8%	8%	8%	8%	8%	8%	
Member H/Holds	47,700	49,325	51,791	52,000	54,600	55,692	
Total Visitor	1,300,000	1,352,000	1,352,000	1,372,280	1,447,755	1,440,894	
Per Caps:							
Admissions	\$4.66	\$4.52	\$4.52	\$4.52	\$4.74	\$4.80	1,352,000
Food	\$2.95	\$2.99	\$3.14	\$3.22	\$3.35	\$3.42	1,300,000
Retail	\$1.52	\$1.67	\$1.70	\$1.94	\$2.00	\$2.06	
Parking	\$0.97	\$0.97	\$0.98	\$1.02	\$1.03	\$1.03	
Rides/Vending/Shows	\$0.84	\$0.84	\$0.84	\$0.87	\$0.88	\$0.89	
Operating Revenues:							
Admission Fees	\$6,056,986	\$6,106,450	\$6,106,450	\$6,198,047	\$6,864,574	\$6,918,494	GA + special
Food	\$3,833,201	\$4,046,327	\$4,249,127	\$4,422,646	\$4,852,527	\$4,926,120	
Retail & Strollers	\$1,975,619	\$2,257,444	\$2,302,593	\$2,666,479	\$2,897,529	\$2,970,311	
Parking	\$1,266,791	\$1,311,440	\$1,324,960	\$1,398,628	\$1,491,188	\$1,484,121	
Rides/Vending/Shows	\$1,086,327	\$1,129,780	\$1,141,078	\$1,192,940	\$1,271,137	\$1,277,764	
Rentals/Picnics	\$351,975	\$355,000	\$355,000	\$400,000	\$400,000	\$400,000	
Gifts/Donations	\$212,500	\$215,000	\$215,000	\$225,000	\$225,000	\$230,000	
Event Catering & Sales	\$1,025,050	\$1,035,301	\$1,045,654	\$1,056,110	\$1,066,671	\$1,077,338	
Society Support	\$3,515,325	\$3,309,688	\$3,476,159	\$3,490,250	\$3,665,750	\$3,739,460	
Sponsorships	\$308,000	\$310,000	\$310,000	\$320,000	\$320,000	\$325,000	
Other Revenues	\$194,598	\$196,544	\$198,509	\$200,495	\$202,499	\$204,524	
Sub-Total Operating	\$19,826,372	\$20,272,973	\$20,724,530	\$21,570,594	\$23,256,876	\$23,553,132	
Tax Levy Support	\$5,444,284	\$5,450,000	\$5,450,000	\$5,450,000	\$5,450,000	\$5,450,000	Fixed at FY `14 level
Total Operating Revenues	\$25,270,656	\$25,722,973	\$26,174,530	\$27,020,594	\$28,706,876	\$29,003,132	

Tax Levy Support remains at FY `14 funding level

Operating Projections Expense

Operating Expense Projections: 2014 - 2019 with Annual **Growth Notes**

Operating Expenses:	2014	2015	2016	2017	2018	2019	Notes	
Personnel Expenses	\$13,425,695	\$13,656,952	\$13,793,521	\$14,100,424	\$14,566,429	\$14.877.093	1% annually + new FTE	
Advertising	\$481,000	\$550,000	\$575,000	\$600,000	\$750,000	\$700,000	Branding	
Professional Services	\$562,200	\$567,822	\$573,500	\$579,235	\$585,028	\$590,878	1% annual	
Utilities	\$2,405,509	\$2,453,619	\$2,502,692	\$2,552,745	\$2,603,800	\$2,655,876	2% +% of "incremental	
Repair & Maintenance	\$584,900	\$614,145	\$644,852	\$677,095	\$710,950		5% annual	
Zoo Society Membership	\$338,771	\$0	\$0	\$0	\$0	\$0	Eliminate in `15	
Sundry Services	\$1,543,708	\$1,559,145	\$1,574,737	\$1,590,484	\$1,606,389	\$1,622,453	1% annual	
Supplies	\$250,300	\$252,803	\$255,331	\$257,884	\$260,463	\$263,068	1% annual	
Animal Food	\$590,000	\$595,900	\$601,859	\$607,878	\$613,956	\$620,096	1% + % of incremental	
COG: Retail & Food	\$2,015,236	\$2,206,320	\$2,358,619	\$2,622,976	\$2,867,521	\$2,921,679	34.69% COG	
Major Maintenance/Capital	\$689,699	\$706,941	\$724,615	\$742,730	\$761,299	\$780,331	2.5% annual	
Services	\$585,291	\$591,144	\$597,055	\$603,026	\$609,056	\$615,147	1% annual	
Insurance	\$236,860	\$239,229	\$241,621	\$244,037	\$246,477	\$248,942	1% annual	
Central Service Allocations	\$350,703	\$354,210	\$357,752	\$361,330	\$364,943	\$368,592	1% annual	
Cross Charges	\$254,436	\$256,980	\$259,550	\$262,146	\$264,767	\$267,415	1% annual	
Incremental Operating	\$0	\$150,000	\$150,000	\$300,000	\$650,000	\$800,000	non-salary	
Other Operating Expenses	\$956,348	\$965,911	\$975,571	\$985,326	\$995,180	\$1,005,131	1% annual	Net Operating
Total Operating Expenses	\$25,270,656	\$25,721,122	\$26,186,275	\$27,087,317	\$28,456,257	\$29,083,199		Margin fluctuat
Net Operating Margin	\$0	\$1,851	-\$11,745	-\$66,722	\$250,619	-\$80,066	\$93,937	annually;
The new master plan projects w	ill generate the	following inc	remental reven	ues & expense	s from the FY	14 baseline		cumulative six-
hat are included in the above p	rojections							years produce \$
Operating Revenues (from increas	sed visitation)	\$779,730	\$797,097	\$1,136,155	\$2,373,556	\$2,303,081	See Notes Below	in total reserves
Personal Expenses to support r	new projects	\$97,000	\$100,000	\$200,000	\$525,000	\$690,000		
Incremental Operating		\$150,000	\$150,000	\$300,000	\$650,000	\$800,000		with fixed tax le
(Utilities, animal food, supplies, splas	h pad costs)							support.
Net Operating Impact		\$532,730	\$547,097	\$636,155	\$1,198,556	\$813,081		

Note: Operating Revenue increases from new facility master plan projects with related personnel and incremental operating expenses for utilities, supplies and animal food – all included in the above expense projections. The "operating revenues" identified above are higher than the Total Operating Revenue projected in Table 1 due to an elimination of Society membership revenues and expenses in FY 15 that were not carried forward from FY `14.

Operating Projections Additional Notes

Year Impacts

2015

- Hippos opening in June 2015
- Admission fee increase (\$.75)
- Paid visitor percentage declines to 42% with Hippo opening as increase in member visits
- Membership fees increase with admission fees: 50% paid to Zoo per MOU
- Late close of Woody's restaurant (no impact)
- Opening of West Entry retail (\$.12 per cap increase)
- Additional 1.5 FTEs for Hippo exhibit; Avg. \$40k + 63% benefit rate

2016

- Underwater Hippos is marketing focus
- Woody's opening by June (\$.15 per cap increase)

2017

- Seasonal attraction is marketing focus with Hippos again
- Could be 'soft' event-like fun, as splash pad and Easy Pass entry will open
- Elephants under construction; some visitor headaches
- Farmhouse Desserts opens (\$.08 per cap increase annualized) but operates seasonally
- Splash pad opens (just expense increase of \$150k for seasonal operations); sponsorship increases as "branded"
- New east arrival and retail (retail impact is \$.24 per cap increase); visitation increase due to "arrival ease" and better accounting
- Increase in parking per cap due to enhanced controls with new arrival sequence; no increase in parking fee (\$12)
- In total, 6 new keepers for Phase 1 of Adventure Africa; 3 hired in July 2017; balance in 2018; Avg. FTE cost \$40k + 63% benefit rate
- Increase in visitor stay time and visitor per capita spending with splash pad

Operating Projections Additional Notes

Year **Impacts**

2018

- Adventure Africa Phase 1 with Elephants opens
- Admission fee increase of \$2 per category
- Attendance baseline increases by 4% but paid visitation declines to 40% as increase in member visits
- Membership fees increase with admission fees
- Behind the scenes tours are offered; revenues in "rides / show" line item
- Three additional keepers are hired for Phase 1 total of 6 for Phase 1; 1 additional keeper hired for Phase 2 in 2018 (half-year)
- Adventure Africa increases operating costs of animal food, utilities and supplies by \$500k annually (\$350k in Phase 1 and \$500k in Phase 2)
- Increase in visitor stay time and per capita spending with African Wildlife Preserve Phase 1

2019

- Adventure Africa Phase 2 with Rhino opens
- No increase in parking
- Two additional keeper / staff hired in 2019 for Phase 2 total of 9 new FTEs for Adventure Africa

Appendices